AUG 21 1944

August, 1944

Pencil Points

the magazine of PROGRESSIVE ARCHITECTURE

Architects know... you can't cheat time with cheap valves!

Time has a way of catching up with valves and *showing up* the difference between good valves and cheap ones.

A cheap valve costs less (and mighty little less) only in the beginning. Records prove that, in the long run, they're much more expensive – not only from the point of view of performance, but also on an actual dollars-and-cents basis. The few dollars that might be saved on the initial cost of cheap valves for a building or home are eventually dissipated on repair and replacement costs – on frequent servicing to keep them functioning in a reluctant sort of way.

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August, 1944

progressive architecture

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QUALITY CONTROL . . . . . BY GENERAL

Literally hundreds of materials—among them metals, fabrics, lacquers, asphalts, synthetic polymers—are used in making modern wire and cable. The chemical, physical, metallurgical tests of all incoming raw materials for each plant are "double-checked" in the Control Testing Laboratory located at that plant. All 9 of these laboratories operate, however, under direct and close supervision of the General Cable Research Laboratory—the largest, it has been said, "in the world" devoted exclusively to wire and cable research.

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SCHOOL WINDOWS

Views

Opinions from readers

Remarks from the editors

Changes of address

Costs in Public and Private Housing

Dear Editor:

As a member of the architectural profession who has practiced for a number of years in New York, I feel that your current article, "On Minding Our Own Business" * is seriously objectionable.

In the first place, I resent your comparison of private versus public housing on the basis of a cheap row of flat houses as against well designed and landscaped government housing. The government has no monopoly of brains or taste. Why not show a worthy private project for comparison?

In the second place, the taxpayer, if he is to foot the bill for subsidizing housing, deserves a better introduction to its cost than your caption, "Cost: Sound and Fury, Signifying Nothing. . . ."

Thirdly, I protest against your statement that, "the real test of costs . . . is the cost per person housed." Applying this test, you proceed to a comparison of the cost of X-Project, providing .499 baths and kitchens per person housed, with Parkside, providing .195 baths and kitchens per person housed. At approximately the same cost per room, you conclude that Parkside is the less costly. In arriving at that conclusion, you completely ignore the fact that, whereas enclosed space is cheap, mechanical facilities are dear. You have compared two projects which are not comparable.

The projects are not comparable either in design or in cost. Your article is a sad disservice to the cause of good housing.

THOMAS WILLIAMS, Architect
Alexandria, Va.

**Evidently Mr. Williams is discussing the articles on Washington housing, entitled "By Their Works Ye Shall Know Them," not "On Minding Our Own Business."*—ED.

Whose Business—Ours or the Kellys'?

Dear Editor:

I read the excerpt from NEW YORK TIMES with photo of Sgt. Kelly's home in Pittsburgh, and could not help but feel how unfortunate that even business people are falling for the New Deal policy of federal or government subsidization of everything at the expense of the taxpayers.

THE TIMES article says the present housing produced six other Kelly boys, all now in the service. By using this as a basis, we can argue that it is *not* necessary for the Government to build houses to produce healthy, patriotic and brave men. Then the article goes on to say, "But will anyone dare say that it is good enough for the Kellys?" And that there is a field right there in Pittsburgh for some subsidized Government housing. We might argue that Mrs. Kelly is too patriotic and that she is of that good, old-fashioned self-reliant American temperment that she does not want subsidy, or charity (for that is what it really is) from the Government. Furthermore, a house does not make a man's character. . .

We have housing projects in Cincinnati. . .

These housing projects have not helped *one poor person*, or taken him or her out of the slums. . .

Government housing "burns me up." Let's get private money and initiative to work, and there will be homes for everyone to suit his or her purse, and we will get back to earth again in the U. S.

GEORGE J. WELLMAN,
Cincinnati, Ohio

Hands Across the Sea

Dear Editor:

This week our Committee sent off to the Soviet Union the first shipment of American architectural and engineering magazines consisting of the May and June issues. I am sure that they will be received with keen interest by the Architects Committee in the Soviet Union. On behalf of the affiliated architectural organizations, I want to take this opportunity to thank you for making this regular service to the Soviet profession possible.

HARVEY WILEY CORBETT,
Architects Committee of the Nat'l Council of American-Soviet Friendship, Inc.

Mr. Ashton Approves

Dear Editor:

Please accept my compliments for your editorial, "Architecture Has Four Dimensions," as it appears in the June issue of PENCIL POINTS.

RAYMOND J. ASHTON, President
American Institute of Architects
Washington, D. C.

Indian Military Architecture

Dear Editor:

Since I arrived in this theater of operations, I have had the opportunity to make a few sketches of Indian structures and scenes. A few days ago, I made a pencil sketch of our mess hall, which is very interesting both from structural and appearance standpoints. I enclose the sketch under separate cover for you to use in any way you see fit. (*Reproduced below.*—ED.)

The simple bamboo trusses, spanning 20 feet, 4 feet on centers, are supported by 6-inch-diameter wood poles, exposed on the outside walls. The curtain walls between the poles are six inches thick and made of stucco. The roof is of heavy pink shingle tile.

So far as I can gather, this building is fairly new, having been built by natives under army supervision.

MAJOR CHARLES N. ROBINSON
(USAAC)

Too Busy, But in Accord with Us

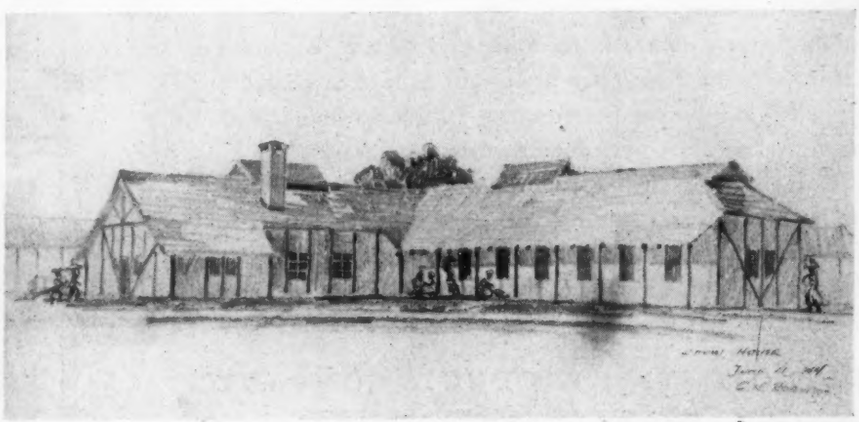
Dear Editor:

I think PENCIL POINTS is today the best architectural magazine—and Kenneth Reid a grand editor. I am speaking of the *new* PENCIL POINTS of course. For a long time I have been wanting to express my gratitude for your change of policy. Fresh air had been sorely needed for a long time in the old PENCIL POINTS. Anyway it's not procrastination that has prevented me from renewing my subscription—certainly not. It is the fact of my presence in Italy at this time, in conjunction with United Nations' armed strategy, that has prevented my receiving the last two issues and is also the cause for my not wanting PENCIL POINTS here. We are just too damned busy—that's all there is to it—and I could not throw an issue away—would consider such action strictly "sacrilegious" with relation to my profession.

Shall renew my friendship with PENCIL POINTS upon my return to United States soil—and in the meantime just you continue "Our Fight" for a humane civilization and humane architecture."

Pfc. FRANK GEORGE

P.S. Naples modern architecture would be inspiring for you. The Finance Building even more than the slightly demolished Post Office.



FOR THE CARGO TO BE LOADED TOMORROW

In order to establish a world-wide balance of economic security and stabilization, America must help prepare the way for foreign governments to open their doors to a universal interchange of products and ideas.

Today is the time for us to look beyond the horizon and lay solid plans for building ports, piers, docks, jetties, harbor improvements and other post-war developments. These are the constructions which will need firm foundations for sponsoring new industries... new communities... new friendships in the world of tomorrow.

The ability of the Raymond organization to fulfill completely the obligation it assumes is a recognized fact the world over. For 47 years owners, architects and engineers who want difficult work done exactly right have formed the habit of seeking Raymond again and again. Write, wire, cable or phone for a competent Raymond engineer to discuss your project with you.

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"That's a $64 Question!"

. . . said the receptionist—when we asked how many people walk over this floor every day

"IT'S my guess that about 220 people have walked over our Armstrong's Linoleum Floor every day for the past two years." That was the estimate of Miss Schwab, receptionist at Golding Bros. Company, Inc., noted New York textile firm. "I'm really no authority," she continued, "but it seems to me that's plenty of wear for any floor!"

Spurred on by Miss Schwab's statement, we put pencil to paper and found that more than 100,000 persons have tramped this office floor of Armstrong's Linoleum. Yet it remains just as you see it—colorful, bright, and ready for many more years of service.

Regular washing and waxing have done a lot to keep this Armstrong Floor in tip-top shape. But the quality built into the floor itself is equally responsible for its resistance to wear and its "fresh" appearance today. That's why you can count on Armstrong's Linoleum to give your client a floor that will dress up an interior, take traffic, and prove economical to maintain. That's why so many architects have found that floor specifications carried out in Armstrong's Linoleum mean real client satisfaction.

For more details on Armstrong's Linoleum Floors, turn to your 1944 *Sweet's* file. And for samples and file-sized specifications, just write Armstrong Cork Co., Floor Division, 6908 State Street, Lancaster, Penna.

ARMSTRONG'S LINOLEUM

ARMSTRONG'S LINOWALL • ARMSTRONG'S RESILIENT TILE FLOORS

Views

(Continued from page 8)

Two-Fold Donation to Red Cross

The June issue carried a notice offering a collection of PENCIL POINTS *to the highest bidder, proceeds to go to the Red Cross.*

Dear Editor:

Here is a copy of a letter regarding my notice in your magazine. I wish to take this opportunity to thank PENCIL POINTS for offering me space in the magazine for this notice, and I am sure you will agree that such a noble reply is a worthy compensation.

JAMES WYNBOROUGH, Designer
New York, N. Y.

Dear Sir:

I read your offer in PENCIL POINTS for June 1944. This collection sounds fascinating to me.

Last year I changed vocations and decided to follow architecture and design instead of accounting, so you see your collection would hold a wealth of material for me.

Unfortunately, I do not have much money. However, I can offer twenty-five dollars and my word that I will donate at least four pints of blood to the Red Cross.

I know you will receive higher monetary offers than mine. I can go no higher. Since the Red Cross is to benefit by your sale, the best I can do is to offer this.

WILLIAM C. LOJAHN
West Nyack, N. Y.

WHENCE CAME THE GENERAL CONTRACTOR?

This is the third of a series of eight articles by EDMUND HOWE POGGI *on the postwar status of the architectural profession. "If I Were an Architect," and "General Contractor Vs. Architect," appeared in the May and July* PENCIL POINTS.

The interests of the Architect, Engineer, and those of the Client whom they represent, must remain inseparable.

In the Architect, Engineer, and Owner, the triumvirate is complete.

The problems of the Client become as well the problems of the Architect-Engineer.

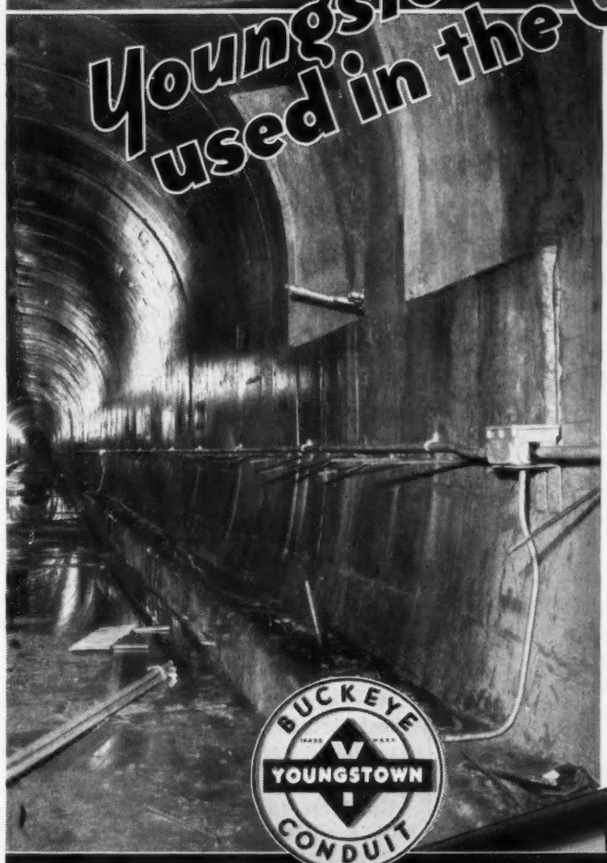
These problems may be widely diverse in character.

It is within the functions of the Architect-Engineer to study and scrutinize each problem with infinite care and attention, to deliberate upon them with prudence and sagacity, and to be guided in their inter-related solutions by the profound precognition of experience.

(Continued on page 12)

FOR SAFETY'S SAKE . . . USE CONDUIT *(Full Weight Rigid Steel)*

Youngstown Buckeye Conduit used in the Chicago Subway



ONLY the sure, lasting protection of full-weight, rigid steel conduit is good enough for the wiring of the new Chicago Subway. This job took over a million feet of Youngstown Buckeye Conduit.

Wherever a wiring system needs adequate protection against water or moisture or vapors, dust and dirt, vibration and possible explosions, there is no dependable substitute for steel conduit. This fact is recognized in the National Electrical Code.

For years, owners, contractors and dealers have depended on Youngstown Buckeye Conduit--knowing that it provides the best and cheapest insurance against hazards, trouble and expense.

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Views

(Continued from page 10)

It is within the functions of the Architect-Engineer to obtain from the Client his viewpoints on these problems, his *desired* solutions in matters pertaining to construction; to advise him of the various ways in which those solutions may be accomplished to his advantage; to protect him from the pitfalls which may endanger his tangible, intangible, and economic interests throughout the entire periods of design and construction, and *until the completion and delivery* of his works.

These works are *performed* by the building trades—by men skilled in the various categories of the work, who are customarily referred to as "subcontractors."

Much of the work of the building trades, today, is of highly technical character, requiring the services of specialized engineers, or of specially trained mechanics, of which the Architect-Engineer must have intimate knowledge, and the General Contractor only superficial knowledge.

Why then a General Contractor?

When the problems of the Client have been solved, described, and illustrated by the specifications and drawings of the Architect-Engineer, their intent and purpose set forth and thoroughly comprehended by the triumvirate, is it not highly inefficient that these same specifications and drawings be released to an intermediary not then familiar with any portion of them, and who in turn delivers these same instruments of service to the men who perform the work?

And is it not economically dangerous that this intermediary be permitted to negotiate the contracts for the various categories of the work to be performed?

Do we then *know* what is being done with the Client's money,—or are we satisfied *not* to know?

To have permitted the General Contractor, however honorable, to interject himself between the triumvirate and the trades, has but opened the door for the admission of the wily and the shrewd, and invited the connivance of the crafty who pretend to honesty, but who, with willful and deliberate cunning, take to themselves—behind closed doors —profits to which they are not entitled.

It is the purpose of this writing to subject to the light of reasoning the incongruities of a method of procedure current in our construction for approximately half a century; to declare that this method is unfair to the Client; that it permits the building trades to become but pawns in the hands of the broker; that it is the result of langour and lethargy upon the part of the Architect, and of his adherence to stupid and obsolete dogma, ill-fitted to cope with current complexities.

As a result of the Architect's complacency and lack of foresight, of his wish to retain authority without responsibility, this broker, whom the Architect has tolerated for a period of years, has encroached upon the province of the Architect to a point where he now desires to eliminate the Architect as the protector of the Client's interest.

Complete control of the Client's constructions—including matters of finance —is the issue.

Whether he likes it or not, the Architect is today, *now*, confronted with the challenge, and he must bestir himself to do something about it.

Complete control is to be in the hands of the General Contractor or of the Architect. Which?

The Architect must accept the challenge and fight it out to a finish, or retire humiliated from the field.

A General Contractor from northern New Jersey has stated that, in his opinion, there are but few Architects in

(Continued on page 14)

BUILT TO LAST

For more than a century this sturdy little house has sheltered a family. Over the long years it has housed four generations, through birth, and life, and death. It has witnessed hardship and sorrow, happiness, contentment, and the joyous conquest of the wilderness.

It was built to last!

So it is with Von Duprin Victory Model fire and panic exit devices. They, too, have the stout character which comes from enduring materials and honest workmanship. Made of tough, malleable iron, they are reliable under every emergency. They will let the people out of your buildings—safely, quickly, surely!

They are built to last!

Plan for extra protection

with

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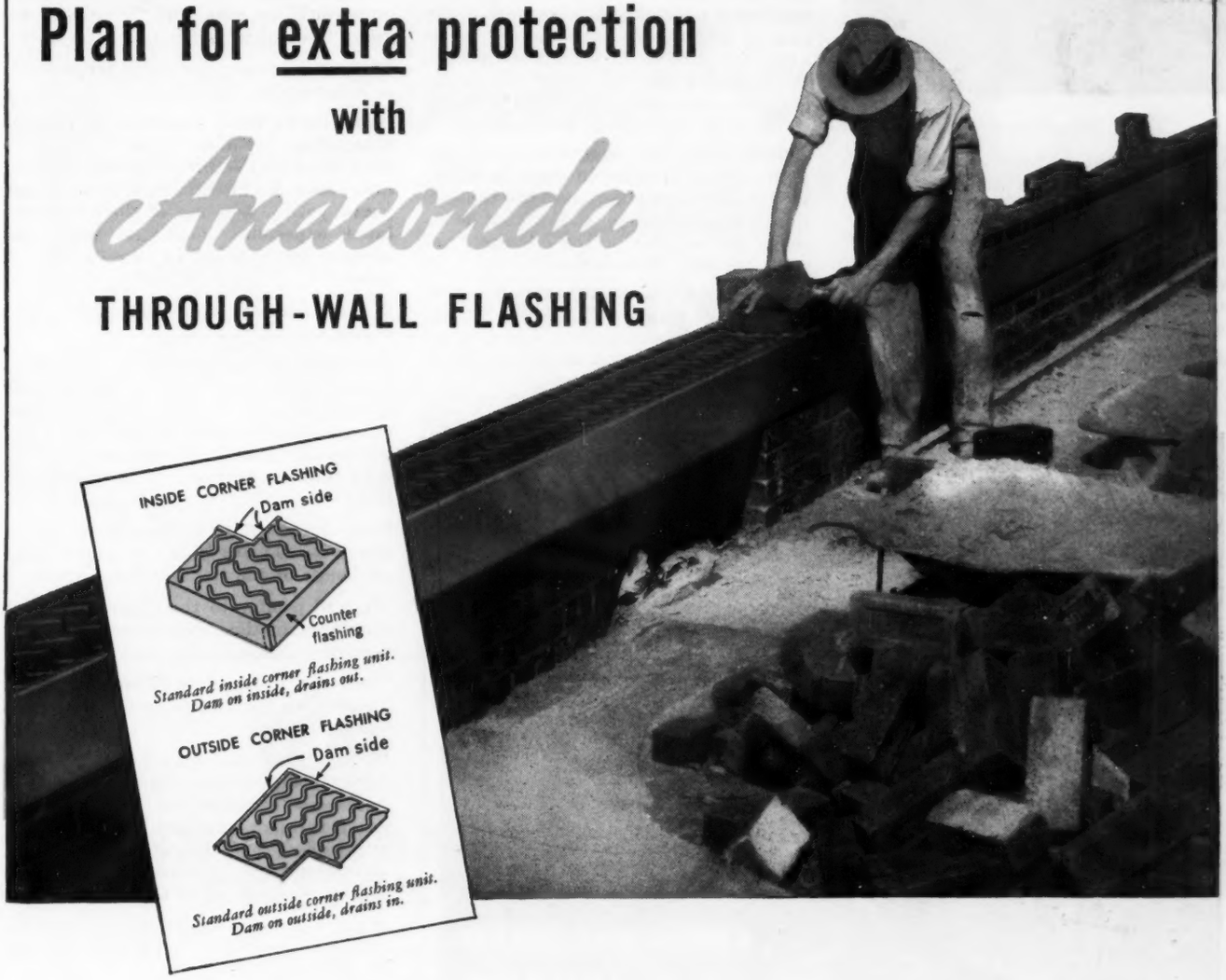
INSIDE CORNER FLASHING
Dam side
Counter flashing
Standard inside corner flashing unit. Dam on inside, drains out.
OUTSIDE CORNER FLASHING
Dam side
Standard outside corner flashing unit. Dam on outside, drains in.

Anaconda Through-Wall Flashing is easily and quickly installed. Specially designed for the purpose, it offers extra protection advantages, and is adaptable to practically every masonry condition and through-wall flashing requirement.

Anaconda Through-Wall Flashing is made of 16 oz. copper—in 5 ft. and 8 ft. lengths—in a range of standard and special widths—including one-piece corner flashings. Bending and cutting can be done on the job.

Although not available today, Anaconda Through-Wall Flashing should be on your list of post-war construction necessities. Send for Publication C-28 or refer to Sweet's Catalog.

ANACONDA THROUGH-WALL FLASHING

—provides drainage in any direction, by means of an integral dam. *Drains dry on a level bed.*

—Zig-zag corrugations, 7/32" high, provide positive bond with mortar in all lateral directions.

—Flat selvage permits neat, sharp bends for counterflashing or locking to adjacent sheet metal without distorting the flashing or interfering with free drainage.

—Is easily locked endwise, even with edges bent, merely by nesting one or two corrugations. Such joints are watertight because of raised corrugations. 4432

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Views

(Continued from page 12)

the entire United States who are capable of taking over the functions of the General Contractor.

In rebuttal, let it be said that there have been Architects and even architectural draughtsmen who have changed vocations and have become successful General Contractors.

Furthermore, a General Contractor in the New York City area, having a contract for a structure designed by a prominent firm of New York Architects, received a payment upon his work in the sum of $9,000, and immediately thereafter failed. The Architects stepped in, administered the balance of the work, and after completion had in hand $3,000 in favor of the General Contractor.

A New York City businessman has expressed it as his opinion that the Architect should have eliminated the General Contractor years ago, adding that he believes the warning to the Architect has come *too late.* Who can tell?

A prominent hardware manufacturer has bluntly stated, "The Architect will be compelled to eliminate the General Contractor as a matter of *self-preservation.*"

But the average Architect appears to be less concerned. "How long has this been going on?" he asks, and "What are we going to do about it?"

The fog, however, has lifted for several, as witness this authority:

Royal Barry Wills, Architect, of Boston, Massachusetts, in his book "This Business of Architecture," writes, "There have been Architects for five thousand years, yet the heritage of their accumulated experience does not spell the answer to success in the world of today."

If you haven't read that book, you should read it!

That isn't all that Architect Wills says. Speaking of Architects of the present day, of *you* and of *me,* he says, "Because of sacrosanct decades of defenseless immunity *his back is more nearly to the wall than he realizes.* (The italics are mine.)

Now, as to what we are going to do about it—*we are going to accept that challenge* of the General Contractor.

We will proffer to the Client the basis of administration, *with* complete protection, and *without* a General Contractor.

"But the prospective Client does not understand the functions of the Architect," you say.

Well! Here is something *new* in Architecture—something really *modern.* After an existence of five thousand years, through which we have whiningly complained that the "public" does not understand the functions of the Architect—*we are going to tell them.*

We are going to advertise! It may not be done individually, but it can certainly be done *collectively.*

It may be done by the American Institute of Architects *if* they elect to take such action, for it is the opinion of the writer that they should be afforded precedence in such a matter, and if they do not so elect, it will be done by others.

In any event, *it will be done,* with businesslike dignity, with intelligence, and with a professional slant.

Furthermore, the stupid regulations governing the practice of Architecture must be revised, modernized, and made practical.

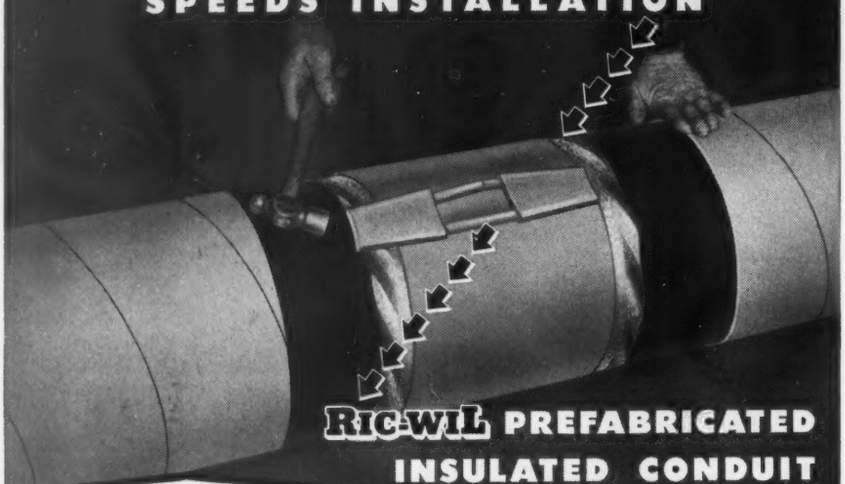
Let us have a code by which we may live and work, and meet the problems of today—not a code that many pretend to live by, and surreptitiously violate.

And now, that we may be enabled to meet the challenge of the present day General Contractor in his postwar drive for the elimination of the Architect, let us review the fundamentals of that challenge with which the prospective Client is confronted, and consider its sales value:

(a) The General Contractor should not be required to accept complete responsibility without complete authority.

(Continued on page 16)

SIMPLE MECHANICAL COUPLER
SPEEDS INSTALLATION



RIC-WIL PREFABRICATED INSULATED CONDUIT
for piping steam, oil or process liquids

Conduit Ends Expanded Smooth to Facilitate Tight Closure

Special machines at the factory remove corrugations from ends of conduit for a distance of 3", so that coupler sleeves will make a positive, watertight closure when units are joined in the field. Prefabricated expansion loops, elbows and tees also have ends expanded smooth for joining with straight units. The result is a permanent, pressure-tight system, requiring no maintenance.

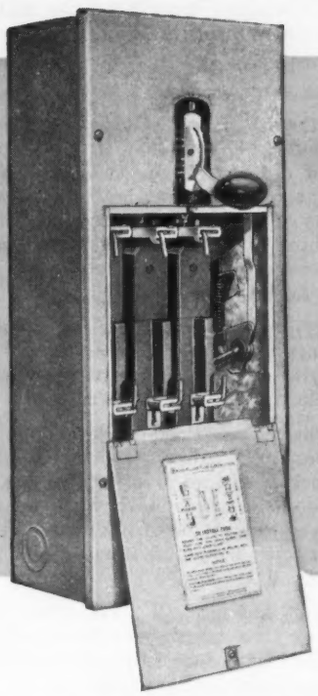
Field assembly of Ric-wiL Prefabricated Insulated Pipe Units has been greatly simplified by a drive coupler, minimizing the need for skilled workmen, and still further reducing installation time. After pipes are coupled or welded and insulation applied, a split connector sleeve is slipped over the opening. Clamps are driven in place (see illustration) drawing the coupler tightly over conduit ends, from which corrugations have been removed at the factory. An asphalt blanket is then applied with heat over the entire uncovered area.

Saves Time and Labor if Welded Closure is Required

The combination of smooth, round expanded ends and drive coupler makes possible a strong, tight welded connection with a minimum of field labor. Clamps are first driven on channels, holding coupler firmly in place while circumferential seams are welded. Clamps are then removed, and longitudinal seam welded.

Write for the new Ric-wiL Catalog

RIC-WIL INSULATED PIPE CONDUIT SYSTEMS
THE RIC-WIL COMPANY · CLEVELAND, OHIO
AGENTS IN PRINCIPAL CITIES



Current "ON"— hands "OFF" live contacts

The switch must be OFF before the door can be opened. Thus, protection against live parts is assured by the Type A

SHUTLBRAK SWITCH

These switches may be used singly — banked in groups — assembled in well-designed switchboards or panelboards — or installed as plug-in units on Ⓕ Busduct . . . On motor circuits — at service entrance — or on installations requiring an operating switch — they give efficient dependable service.

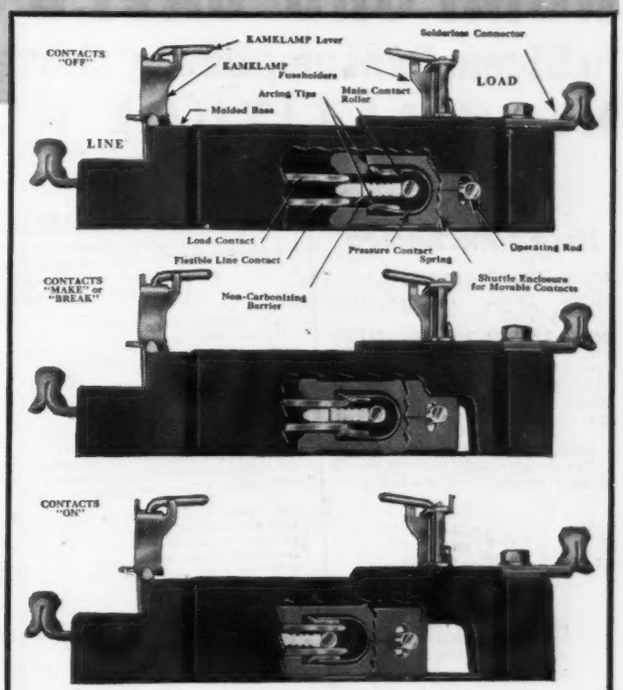
The Ⓕ Shutlbrak Switch is unique in that the contacts are *shuttled* on and off — with the roller type main contact and the auxiliary contacts enclosed in an insulated shuttle. This shuttle assembly, in turn, is entirely surrounded by insulating material.

Ⓕ Kamklamp (pressure type) Fuseholders take either ferrule or knife-blade types of fuse terminals. The new Ⓕ Solderless type Pressure Connectors assure perfect contacts.

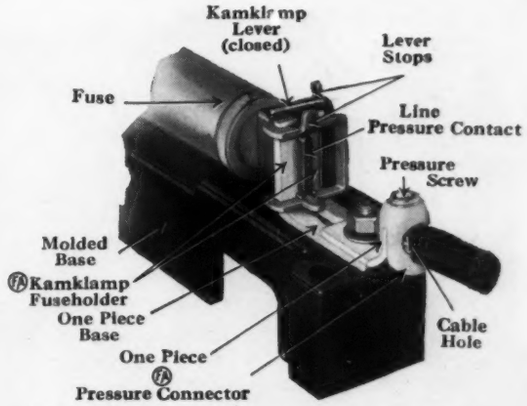
Capacities: 30 to 1200 amperes, inclusive, for 250 volts AC or DC, and 575 volts AC, in 2, 3 and 4 pole types . . . Approved by Underwriters' Laboratories, Inc.

For detailed information

and suggested specifications for Ⓕ Shutlbrak Switches, Switchboards and Panelboards, write for illustrated Bulletin 70 . . . Frank Adam Electric Company, Box 357, St. Louis (3), Mo.



The above cuts show details of shuttle assembly, contact design, and Ⓕ Kamklamp Fuseholders.



Details of Ⓕ Kamklamp Fuseholders and Ⓕ Solderless Type Pressure Connector.

Frank Adam
ELECTRIC COMPANY
ST. LOUIS

Views

(Continued from page 14)

(b) The Architect is not entitled to authority because he will not accept responsibility. He must be under our jurisdiction and control. We will employ the Architect.

(c) The General Contractor, with complete authority, will build within the estimated cost.

(d) The General Contractor, with complete authority, will complete the works within the allotted time.

(e) The Client will pay all costs, plus the General Contractor's stipulated charges for design and construction.

It would seem reasonable that we ask, "What costs?" and "What time limit?" and "For what works?"—and if we do not know the answers to these questions, how may we compete?

Upon this basis the General Contractor seeks—not to *meet* competition—but to eliminate it.

And if we know the answers to those questions, we shall not as yet have declared ourselves concerning the matter of *complete* responsibility.

"Aha!" laughs the General Contractor, "I have you *there*."

Nevertheless, if we but boldly rise to this challenge, confident in our knowledge of design and construction, go directly to the prospective Client with honesty of purpose in our bearing,—talk with him as businessman to businessman—we shall discover that we are still party to the triumvirate.

It may be admitted that the General Contractor is interested in completing the works of construction in the shortest possible time, just as we are.

But the General Contractor does not function in a capacity where it might be expected of him to say, "This has not been done in accordance with my contract! It must be torn down and replaced with proper materials and in a workmanlike manner."

He may not say, "I have substituted *this* for that which was contemplated, because I have found the substitution to my own material advantage."

He will not say, "This payroll has been padded—only a little—because I feared that a greater sum might be observed."

He will not say, "The sub-contractor's proposal for the work of his trade was in the amount included in my own proposal, but I subjected this subcontractor to the 'sweating' process before I awarded him the work. He is doing the work of his trade at cost, because I have taken from him his estimated profit, to increase my own."

Nor will he say to the Client, "I build buildings the way the Client thinks he wants them. I am not interested in buildings. I am a Corporation, and I am interested only in profits."

He has grown to great strength, this General Contractor, else his challenge would not be serious.

Research indicates that in the eighteen-eighties the greater part of construction was of wood, and that the General Contractor was known by the term "Carpenter & Builder."

This man was a hard-working tradesman, as proud of work well performed as is the mechanic of today. In his little wooden buildings, and for the purpose of simplification and coordination, he included in his work the very few lesser jobs of foundations and chimneys built by the mason, the plastering of interiors by the plasterer, the pump on the kitchen sink by the plumber, the painting, and the tin-smithing.

Then came the innovations of lighting—by gas, by electricity; heating—by the hot-air furnace, by steam, by hot-water; the marvel of the bath-room, tile work, and a host of new trades until the work of the carpenter dwindled in importance.

(Continued on page 18)

RUMFORD SAVED 47.5%
in Steam Consumption by changing over to HIGH ALTITUDE HEATING

★ ★ ★

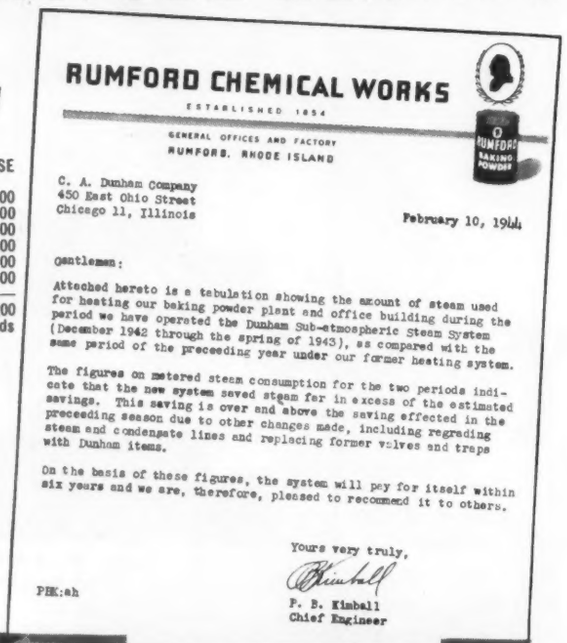
Here's the Record

AC'T'G PERIOD	LBS. STEAM USED 1941 1942	1942 1943	DECREASE
Dec.	1,662,000	1,021,000	641,000
Jan.	1,330,400	993,000	337,400
Feb.	1,611,200	749,200	862,000
March	1,375,400	797,000	578,400
April	711,400	443,000	268,400
May	293,600	101,600	182,000
Total	6,974,000	4,104,800	2,869,200

The average monthly saving in pounds of steam per degree day was 47.5%.

Fuel-Saving Starts With CONTROL

May we send additional interesting details on High Altitude Heating? Please write for Brochure 632.


RUMFORD CHEMICAL WORKS
ESTABLISHED 1854
GENERAL OFFICES AND FACTORY
RUMFORD, RHODE ISLAND

C. A. Dunham Company
450 East Ohio Street
Chicago 11, Illinois

February 10, 1944

Gentlemen:

Attached hereto is a tabulation showing the amount of steam used for heating our baking powder plant and office building during the period we have operated the Dunham Sub-atmospheric Steam System (December 1942 through the spring of 1943), as compared with the same period of the preceding year under our former heating system.

The figures on metered steam consumption for the two periods indicate that the new system saved steam far in excess of the estimated savings. This saving is over and above the saving effected in the preceding season due to other changes made, including regrading steam and condensate lines and replacing former valves and traps with Dunham items.

On the basis of these figures, the system will pay for itself within six years and we are, therefore, pleased to recommend it to others.

Yours very truly,

P. B. Kimball
Chief Engineer

PBK:eh

DUNHAM *makes fuels go further*

C. A. DUNHAM COMPANY
450 E. OHIO ST., CHICAGO 11, ILLINOIS
Toronto, Canada
London, England

UNDER THE NATION'S ROOF

August, 1944

The principle of bituminous Built-up Roof construction is so fundamentally sound that its efficiency and economy have never been seriously challenged. But maximum Built-up Roofing protection depends on the right MATERIALS...the proficiency of the MEN applying them and the correct METHODS for the particular problem. Ruberoid offers all three as one service.

Here are a few basic roof facts for the specifier's notebook: Four popular types of Built-up Roofs are: (a) Coal Tar Pitch and Felt; (b) Asphalt and Asphalt Felt; (c) Smooth finished Asphalt and Asbestos Felt; (d) Combination roof of Asbestos and Asphalt Felt with Asphalt. Ruberoid is not wedded to any one type. Ruberoid engineers and Approved Roofing Contractors recommend the most suitable roof to meet any condition.

A good man to know is the Ruberoid Approved Roofer. He is selected on the basis of his integrity, experience and craftsmanship. He is not wedded to any particular type of roof because in handling Ruberoid materials he is familiar with, and does apply, all types of Built-up Roofs.

No Built-up Roof is better than its flashings. Ruberoid has practical flashing specifications to meet every condition. Ask for Specification Catalogue A.I.A.-12-B-1.

Roofing Felts with valves--that's Ruberoid P-E-R-F-O-R-A-T-E-D Felt. In mopping the felt, the vapors are trapped--which is the primary cause of blisters. The outlet valves release these vapors. Inlet valves insure a complete asphalt seal between sheets of the completed roof.

The latest Ruberoid Roofing Specification Book should be in every architect's file. Contains complete specifications and details on all types of Built-up Roofing--(a) Asphalt, (b) Coal Tar Pitch, (c) Asbestos. It's right up to the minute. Ask for A.I.A. File 12-B-1.

Write your nearest RUBEROID office for complete specifications.

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Asphalt and Asbestos Building Materials . . . Industrial Insulations

For up-to-the-minute information on your roofing and building problems consult our nearest sales office:

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Views

(Continued from page 16)

He became the General Contractor, and kept in close touch with the Architect for tutelage concerning the meanings of specifications and drawings which made mention of these strange new items and methods, and illustrated them.

It is submitted that in this period the Architect should have *returned* to the province of Master Builder, but with the world changing rapidly about him he has plodded on a-foot in his oldtime manner, while the world changed from horse to horseless-carriage, to automobile, and to aeroplane.

Allen Brett, Engineer-Economist, of Detroit, Michigan, has stated (see PENCIL POINTS for February 1944), annotating the oneness of Architect and Engineer: "We should use *Architect* in its broader meaning, going back to the Greek for our understanding of the term. *Arcos*, first or leader; *tecto* to build or construct. The architect is, or should be, the master builder."

To those of us who are sticklers for adhering to the province of the Architect as in the days of yore, let it be said that "*Here is tradition.*"

Fuel-Saving Starts With CONTROL

USE THESE **BARBER-COLMAN** AUTOMATIC

CONTROL SYSTEMS FOR FUEL-SAVING

THE bulletins illustrated above explain in detail the purpose and method of operation of three Barber - Colman Temperature Control Systems which have proved their ability to save substantial amounts of vital fuel by preventing waste of heat through automatic maintenance of uniform temperature. COMPENSATED CONTROL is an improved heat-anticipation system based on actual temperature rise in the duct or at the radiator, which is extremely effective in preventing wide fluctuation in room temperature. The ECONOSTAT is a cycler system with the length of on-off periods controlled from a remote outdoor thermostatic bulb, thus accurately and automatically adjusting heat supply to meet changes in outdoor temperature. HOT WATER HEATING CONTROL is an indoor-outdoor dual-thermostat system which automatically changes the temperature of the circulated hot water to match outdoor temperature changes. These are only a few of the many combinations of high-quality, accurate, durable Barber-Colman Temperature Control equipment which can be engineered to provide efficient fuel-saving control in all types and sizes of buildings. Write for copies of these circulars today and join the vital fuel-saving program.

BARBER-COLMAN COMPANY
1230 ROCK STREET • ROCKFORD, ILLINOIS

ARCHITECTURAL DESIGNERS WANTED

High class designer experienced in Gothic and Romanesque ecclesiastical work wanted for permanent position in Detroit. Must be good delineator and able to make full size details of ornament. Work to include churches, convents, rectories, monasteries, etc. Excellent salary for properly qualified man. Reply C/O PENCIL POINTS, Box No. 15.

Architectural designer with contemporary outlook and ability to work with others wanted by large architectural and engineering firm. Should be capable of developing design under criticism to working drawing stage. Location Detroit. Reply C/O PENCIL POINTS, Box No. 16.

ARCHITECT WANTED

College trained, for design, production and plant layout. This position is with a progressive manufacturing concern in upstate New York. Excellent postwar possibilities. If available now, write full personal data. Reply C/O PENCIL POINTS, Box No. 18.

ARCHITECTURAL DRAFTSMAN WANTED

With at least 5 years' experience. For plant layout work with large progressive manufacturing concern in upstate New York. Excellent postwar possibilities. If available now, write full personal data. Reply C/O PENCIL POINTS, Box No. 19.

OTHER NOTICES

THORVALD PEDERSON, Architect, A.I.A., wishes to announce that he will continue the practice of the late Paul Hueber at the Syracuse-Kemper Building, Syracuse, N. Y.

KETCHUM, GINA & SHARP, Architects, wish to announce the removal of their offices to 5 East 57 Street, New York 22, N. Y.

SEYMOUR R. JOSEPH, Architect, A.I.A., wishes to announce the removal of his office to 1841 Broadway, New York 23, N. Y.

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PENCIL POINTS complete from January 1936 through October 1940; May 1941 through July 1943.

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What is your offer for the lot, shipping charges prepaid? Write C/O PENCIL POINTS, Box No. 20.

Back Numbers of Pencil Points Wanted

1928—Nos. 3 and 8; 1938—No. 5. Reply, C/O PENCIL POINTS, Box No. 17.

(VIEWS *continued on page 104)*

AMERICAN ARCHITECTURE MAKES BRILLIANT AND UNIQUE CONTRIBUTION TO PSYCHOLOGICAL WARFARE

On June 14, American architecture won a major engagement in psychological warfare when an unprecedented exhibit, occupying the entire main floor, opened at the National Museum in Stockholm, Sweden.

To insure its effectiveness, the city blossomed with posters heralding the show "America Builds"; a huge American flag flew over the Museum door, and among those present at the opening were Crown Prince Gustaf Adolf, Crown Princess Louise, and Prince Eugen, the brother of the King.

Sweden, remember, is a neutral country open to visitors from Germany quite as much as to those from the United States —with Germany closer at hand, so to speak. Furthermore, the only route to Sweden from England, except by infrequent and highly specialized safe-conduct ships, is by air. All the more remarkable, then, that the work of John Funk; Gardner Dailey; Harwell Harris; Gropius; Breuer; Philip Johnson; George Howe; Vincent Kling; Pietro Belluschi and John Yeon; Lescaze; William Hamby and George Nelson; Carl Koch; Richard Neutra; the Saarinens; Perkins, Wheeler & Will; Franklin & Kump; Skidmore, Owings & Merrill; Anderson and Beckwith; van der Rohe; Burnham Hoyt; Philip Goodwin and Edward D. Stone; Ketchum and Giná; William Wilson Wurster; Ganster and Pereira; Raphael Soriano; Reinhard & Hofmeister; Corbett, Harrison, Fouilhoux and MacMurray; Albert Kahn; Ely J. Kahn and Robert A. Jacobs; Stonorov and Kahn; Clarence Stein; Reginald Johnson and Wilson, Merrill and Alexander; Alden Dow; Hugh Stubbins, Jr.; George Fred Keck; Vernon DeMars; Carl Grommé; Francis Lloyd; Hervey P. Clarke; Samuel Marx; John J. Rowland; Holabird and Root; Moore & Hutchins; Roland Wank; and Walter Bogner—to mention some highlights—should be shown at this time in Stockholm's great Museum. Large mounted photographs and plans, accompanied by descriptive captions, are organized into a brilliant show, the opening of which, according to cabled report, "received smash play in all Stockholm newspapers, literally crowding the war headlines to one side."

Other remarkable things about this huge show: it is the first architectural exhibit ever held at the National Museum, and it is also the first time that the United States as a whole has been represented there in any form.

That this exchange of information and understanding between the two countries will foster a sizable and important amount of goodwill at a time when the world is in desperate need of better understanding is indisputable. After a 10-week showing in Stockholm, the exhibit will be sent on a country-wide tour and —later on—it may possibly go to other countries.

Credit for this splendid event is shared by the Sweden American Foundation in Stockholm, the American Scandinavian Foundation of New York, the National Association of Swedish Architects, the New York Museum of Modern Art, numerous architects and others who helped assemble the material, and the U. S. Office of War Information.

Actual organization of the exhibit started last December when OWI's Overseas Branch in New York received a cable from the OWI Stockholm Chief, Karl Jensen, describing the plans being jointly made by the Scandinavian-American groups in both Stockholm and New York to celebrate the 25th anniversary of their founding with an exhibit of architecture in the United States. Henry Goddard Leach, head of the American Scandinavian Foundation, persuaded the Museum of Modern Art to undertake the planning of the exhibit and the assembling of the major part of the material to be shown.

The Office of War Information agreed to finance the work, and, in conjunction with the Department of State, to handle the physical preparation of all photographic material and to ship the entire show to Stockholm.

As planned by the Museum of Modern Art staff, under the direction of Elizabeth Mock, the exhibit consists of four main sections:

1. Pioneers of Modern Architecture—extensive showing of the work of H. H. Richardson, Louis Sullivan, and Frank Lloyd Wright.

2. Outstanding Buildings of the Past Ten Years—essentially the same architectural work now on exhibit at the Museum of Modern Art in their great "Art in Progress" show (see PENCIL POINTS, June 1944).

3. U. S. Housing in War and Peace, a collection of projects originally assembled by the Museum and reproduced and shipped through OWI facilities for a separate exhibit in London. This section is skilfully broken down under headings such as "The First Emergency (last war)"; "The Planned Community"; "The Slum Problem"; "Growing Recognition"; "Housing to Provide Employment"; "Aid for Private Builders"; "Public Housing as a National Policy"; "Emergency Housing for Agricultural Workers"; "War"; "Community Facilities"; "Types of Private War Housing"; "Building Methods"; "Equipment"; "Mutual Ownership Projects." From Electus Litchfield's work in Camden, N. J., in the first world war down to Wurster's Valencia Gardens project and Neutra's Channel Heights work, the section is both inclusive and instructive in U. S. social, planning, and structural techniques.

News

Design and construction

Developments afield

Building Regulations

Related Professions

Products Progress

4. Planning in the U. S. A. This section is an exhaustive presentation of two widely separated types of planning in the U. S. A. One, the TVA work, shows the reclamation, replanning, and redevelopment of an entire region; the other, the work of the Chicago Planning Commission, shows some of the advanced techniques inherent in intelligent planning for the healthy growth of a large city.

Even with this great amount of material—some 500 photographs and 100 photostats, all appropriately captioned and mounted—there was still available space in the Museum's halls. OWI, therefore, assembled a representative group of well-designed interiors, prepared caption and photographic material, compiled biographies of architects and designers involved, and shipped the material out along with pieces of the actual fabrics and structural materials used.

Yet another section, prepared with the advice of Talbot Hamlin of Columbia University, was built around "Historical American Buildings." Some 55 photographs and explanatory captions comprise this portion of the exhibit.

In addition, OWI prepared the art work for the poster which was to be a familiar sight to Stockholm residents, collected and shipped a group of recent American books on architecture, the files of the major architectural magazines for the past year, and a group of color slides of American paintings, sculpture, and murals. Documentary and technical films also went forward for periodic showing at the Museum.

Raymond Ashton, A.I.A. President, prepared greetings for the opening which OWI cabled to the Sweden America Foundation in Stockholm: "American Institute of Architects sends greetings, sincere wishes for successful exhibit opening June 14th. Praise particularly due your organization for such courageous undertaking at time when world wracked by war. To architects of Sweden, we pay tribute for their dignified, artistic, realistic approach to architectural problems. In this modern world, Swedish architecture evidenced good taste and freedom from slavery to traditional forms."

We on PENCIL POINTS can add but a sincere "Amen" and congratulations all around.

News

Three Ohio architects decided to "do something" to help out in the war effort.

Now they are industrialists in the wood box field, filling rush orders for all kinds of wooden boxes, from those used to ship big Army bridge construction pontoons to tiny ones for shipping bolts, and from boxes with rope handles for carrying land mines to light baskets for carrying Coca Cola bottles.

One of them, Todd Tibbals, figured nobody was manufacturing boxes on a mass production basis and that lots of them would be needed to ship supplies overseas to the armed forces, so he forthwith organized the Wood Box Association, bought a small lumber company, picked up some second-hand automatic nailing machines, and began to look for business. He didn't have to look far; business poured in.

The three architects applied their designing talents (with which they had done quite well in the architectural field until the war started) to working out simple jigs and fixtures, automatic cutting equipment and other devices so that completely inexperienced men could make boxes—as long as they knew how to swing a hammer and pound a nail. In May 1944 they received 56 railroad carloads of lumber to be made into boxes, which gives some idea of their output. 1000 C-ration boxes per day for soldiers are turned out.

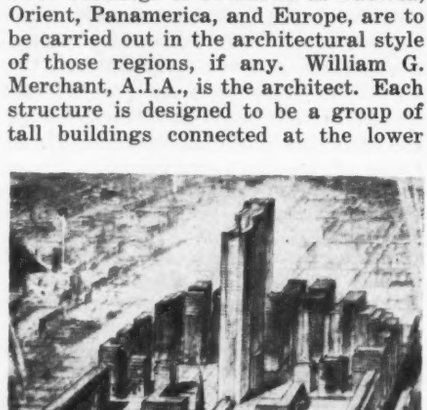
The three are Todd Tibbals, Noverre Musson, and Wilmer Nieb—all Ohio State University graduates. Tibbals is general manager and chief salesman of the Association; Nieb is chief engineer, in charge of estimating and time study; Musson is traffic and personnel manager. Charles Lewis, who formerly worked with them as a carpentry contractor, is now factory superintendent; three of the carpenters who worked with Lewis are now plant foremen; T. J. Callahan, former executive secretary of the Retail Lumbermen's Association, is purchasing agent and office manager.

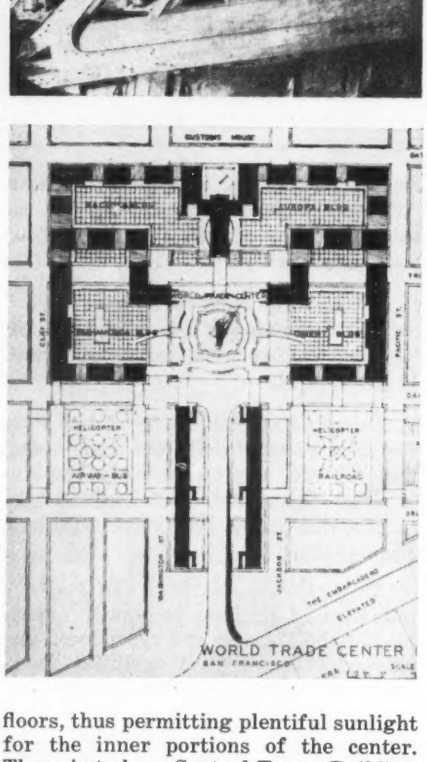
These three men have shown one way of adjusting successfully to the war emergency, though they have their weather eye out for the postwar era, too. They plan to use their lumber yard and mills to manufacture prefabricated houses and apartments, and are now designing and building the models.

San Francisco's proposed postwar World Trade Center is said to be winning support from northern California organizations; several important groups are considering taking entire buildings.

The Center is designed to house importing and exporting offices, warehouses, exhibits, and meeting halls in a modern group of buildings at the site of the present wholesale market district; it is planned to bring together American and foreign exporters and importers, consulates, air, sea, and land transportation services, brokers, every line of industry concerned with world trade.

Four buildings to be known as Pacifica, Orient, Panamerica, and Europe, are to be carried out in the architectural style of those regions, if any. William G. Merchant, A.I.A., is the architect. Each structure is designed to be a group of tall buildings connected at the lower





floors, thus permitting plentiful sunlight for the inner portions of the center. There is to be a Central Tower Building facing on a small park and other buildings will be stepped downward toward the water front to afford a view of the Bay. A central garage several stories high, with "a tower of jewels" on the roof, is planned. The whole is to be kept within San Francisco's city master plan.

Correction:

In the June issue of PENCIL POINTS, on page 14, first column, under the news item on building costs, the figure "30%" should be "20%".

A traveling exhibition of American architecture for the Soviet Union is being prepared by the Architects' Committee, National Council of American-Soviet Friendship, Inc., in collaboration with the Overseas Branch of the O.W.I.

A survey of American buildings from colonial times to the present, the exhibit will endeavor to give a coherent picture of the state of building in this country, the factors influencing its development, and the problems it seeks to solve; it is to be several hundred pictures and plans mounted on 50 or 60 large panels. Organization of its material will be under the direction of Vernon DeMars, Chief of the NHA Housing Standards Section; Professor Talbot Hamlin, Librarian, Avery Library, Columbia University School of Architecture; Joseph Hudnut, Dean, Graduate School of Design, Harvard University.

The first monthly shipment of American architectural publications has been shipped to the Soviet Union through the services of the Architects' Committee of the American-Soviet Council. They are to be made available to architects through the Architects' Committee of VOKS (USSR Society for Cultural Relations with Foreign Countries) in Moscow. It is reported that Soviet architects are interested in back numbers of architectural publications of 1941-44 vintage and the Committee will welcome any back numbers American architects care to contribute for shipment to the Soviet Union.

The Soviet government has formed a committee for architecture whose functions are to include supervision of regional and city planning, housing construction, standards and design of building projects, the building industry, and architectural schools. Its aim is to raise the level of planning and construction and it will control practically all fields of architecture.

The first technical bulletin to be issued in 1944 by the Producers' Council Technical Committee is to be distributed to architects, engineering offices, and government construction officials.

It is edited by the Department of Technical Services of the A.I.A. It indicates that those new building products which were ready but had not been introduced at the time war broke out will be put on the market for civilian use as fast as wartime restrictions allow.

The issue carries an enclosure, "Modular Planning as Related to Building Design" (official ASA A-62 publication), said to furnish information to permit the designer to study modified drafting technique—the use of the grid—in the layout of buildings and development of construction details as a prerequisite to using coordinated sizes of building materials and equipment for the postwar period. Diagrams and installation details are given also.

News

A $10,000 competition for a postwar studio theater design to be housed in a new 12-story building (see PENCIL POINTS May 1944) was announced by Chicago's radio station W-G-N, on the occasion of its 20th anniversary.

The contest is open to all persons, partnerships, corporations, and associations everywhere, except W-G-N and Chicago Tribune employees and members of their families. First prize is to be $5,000; second, $2,500; third, $1,000; 15 honorable mentions, $100 each.

The new building is to be designed to harmonize architecturally with the Tribune Tower and the present W-G-N building and will house all of the artistic and business activities of the station; it is to incorporate expected postwar developments in television and improvements in the present amplitude and frequency modulation type of broadcasting. The theater, the entrance to which is to be even with the upper level of Michigan Avenue, is to occupy the northwest section of the building.

W-G-N has prepared a booklet giving contest rules which will be sent to anyone making written application to the station. All entrants in the competition are required to register their intention to compete not later than 12 o'clock noon of Wednesday, November 1, 1944. Registration does not obligate submission of an entry but is for the purpose of enabling the sponsor to make interim communications with the registrants as covered by the rules. All entries in the competition must be received not later than 12 o'clock noon of Wednesday, November 15, 1944. A registration form is provided in each copy of the booklet.

The jury of awards consists of: Col. Robert R. McCormick, editor and publisher of the Chicago Tribune, president of W-G-N; Frank P. Schreiber, W-G-N manager; Henry Weber, W-G-N music director. John W. Park, a licensed architect, and production manager of the Chicago Tribune, has been appointed to act as agent, counsel, and professional adviser. The jury's decisions will be based on general excellence of the entries, ingenuity in the use of space, beauty and distinction of design, functional efficiency, anticipation of future needs, and showmanship. Announcement of the decisions will be given within 45 days after they have been made.

Herman T. Stichman of New York City has been appointed by Governor Dewey as Commissioner of Housing in the New York State Division of Housing to succeed Ira S. Robbins, Acting Commissioner since January 1943.

As Commissioner, Mr. Stichman is to receive an annual salary of $12,000. Mr. Robbins, who will now become a Deputy Commissioner of Housing, was requested by Mr. Stichman to continue his association with the Division in this capacity, at an annual salary of $10,000.

Upon graduation from Yale University Law School, Mr. Stichman became Assistant United States Attorney for the Southern District of New York until December 31, 1927, when he became assistant to Emory R. Buckner in the Queens Sewer investigation; was associated in law practice with Root, Clark, Buckner & Ballantine of New York, 1929-1937; in 1938 was appointed Assistant District Attorney of New York County by Governor Dewey, then District Attorney; in 1942 was appointed head of the Fraud Bureau of that office; in 1943 received a leave of absence from the District Attorney's office to accept from Governor Dewey the appointment as Moreland Act Commissioner.

Mr. Stichman has been for several years a member of the Board of Trustees of New York City's Madison Settlement House.

Gilbert Rohde, member of American Designers' Institute, whose achievements and high standards in the field of design are well known, died suddenly on June 16th.

His wife, Peggy Ann Rohde, will carry on the work in industrial design, product development, store modernization and interiors, at 22 East 60th Street, N. Y.

HOUSING NOTES

New legislation expands FHA's Title VI (war housing) insurance authorization from $1 billion $600 to $1 billion $700 million, effective only to July 1, 1945. This is said to make insured financing available for approximately 22,200 new family dwellings. It also provides for insured refinancing of Title VI mortgages after July 1, 1945, limiting the amount of such refinancing to the original principal amount and unexpired term of the existing mortgage. This provision permits the postwar improvement of homes through financing under Title VI.

Revised regulations on property improvement loans insured under FHA were announced by FHA, effective July 1, 1944. These were said to have been made, some in the interests of clarity, some in the light of making Title I an even more efficient aid to the building industry.

Loans for conversion of existing properties to provide housing for war workers carrying a maximum of $5000 with a 7-years-32-days maturity.

Loans for new non-residential, non-agricultural structures are limited to a $3000 maximum with a 3-years-32 days maturity.

Loans for erection of agricultural buildings limited to $3000, with a 7-years-32-days maturity, if made without the security of a first mortgage, although term may be 15 years-32 days if loan is secured by a first mortgage.

"The most important change in the regulations . . . ," said Commissioner Abner H. Ferguson, "is new requirements designed to restrict the operations of a comparatively few unscrupulous dealers. . . ."

ARCHITECTS' ACTIVITIES

O'Dell, Hewlett & Luckenbach of Detroit were appointed architects for the Michigan School for the Deaf at Flint, to cost approximately $1 million. Plans include a new school and power plant, a new dormitory, extensive alterations to existing buildings, a new site plan, roads, utilities, etc.

Charles M. Stotz, A.I.A., won first prize in the Pittsburgh Architectural Competition, "An Idea for a War Memorial," with his design for an amphitheater on Flagstaff Hill, Schenley Park.

Wisconsin Chapter A.I.A. has re-elected its city housing commission chairman, Leigh Hunt, as president, with Ralph Kloppenburg, vice president, and Alexander H. Bauer, secretary and treasurer. John Brust and Elmer Johnson were elected to the Board of Directors.

C. Godfrey Poggi was re-elected president of the New Jersey A.I.A. at a joint meeting with the New Jersey Society of Architects. Other officers: Marcel Villanueva, first vice president; Robert J. L. Cadien, second vice president; C. W. Fairweather, secretary; Gilbert C. Higby, treasurer.

Professor Wilbert C. Ronan has been named head of the Department of Architecture and Landcape Architecture at Ohio State University, to succeed Professor Charles St. John Chubb, who gave up his administration duties to devote full time to teaching.

8th Annual Conference on City and Regional Planning at Massachusetts Institute of Technology is to be held from October 16 to 27.

It is sponsored jointly by the Institute and the American Society of Planning Officials. Seminars are to be conducted by Professors Frederick J. Adams and Flavel Shurtleff, assisted by visiting lecturers. Fee is $50. Applications should be addressed, not later than October 2, to Professor Adams, Division of City Planning, M.I.T. Cambridge 39, Mass.

Charles Abrams of the New School for Social Research, New York City, characterizes FHA as "a sacred cow in the federal barn that permitted herself to be milked only by properly certified financial institutions."

News

Products Progress

Baseboard Panel Heating

Crane Company, 836 South Michigan Avenue, Chicago, announces development of a new radiant heating system by means of continuous radiant panels replacing the conventional baseboard in rooms, leaving complete freedom in use of floor and wall space and furniture arrangement. They state that by distributing the entire heat over a large surface the entire room is warmed uniformly; a negligible amount of heat is carried to the ceiling by air currents; service records demonstrate a temperature differential of only 2 to 4 degrees from floor to ceiling in a room heated from the baseboard; the system is applicable to new or old homes.

High Temperature Electrical Insulation

High temperature silicones for electrical insulation are new chemical materials claimed to make possible the building of lighter and better electrical equipment. Sand, brine, coal, and oil form their basic elements and, by a union of silicon and oxygen, they can be produced as solids or liquids in a variety of forms.

Research by scientists of the Corning Glass Works revealed some water-white liquid polymeric silicones with unusual chemical and physical properties, now called Dow Corning fluids and being produced for secret wartime uses. From these fluids the high temperature silicones stemmed; they are manufactured at Midland, Michigan, by the Dow Corning Corporation, a new subsidiary of Corning Glass Works and Dow Chemical Company.

Silicone chemistry claims:

A three h.p. motor after silicone insulation provided a 10 h.p. output.

To reduce size and weight, and to increase life of electrical equipment.

Machines with silicone insulation may be placed in operating locations where surrounding temperatures are higher than has been possible heretofore.

Exhaustive tests were said to be made on a 250 KVA 440 volt generator with a new insulation; after about 3000 hours at 482° F. operating temperature, the insulation was still in good condition; according to best available means for interpreting accelerated life tests, this should be equivalent to 400 years of operation at the normal 266° F. operating temperature of this machine, engineers reported.

Fireproof Fabrics

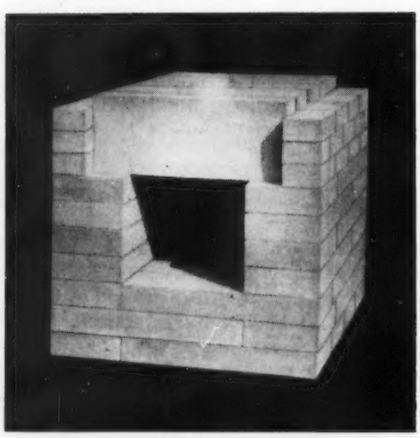
Made by new processes for dyeing and printing decorative fabrics woven of incombustible glass fibers, these new "Fiberglas" materials are manufactured by Thortel Fireproof Fabrics, 101 Park Avenue, New York. They can be dyed in brilliant solid colors, or in stripes, figures, and prints. In weight, they are said to compare with damask or heavy satin, do not retain wrinkles, can be dry-cleaned, the whites can be laundered and ironed, are mothproof, will not rot or disintegrate under severest climatic conditions, will not stretch or sag under humidity changes, their colors are sun- and cleaning-fast. They are recommended chiefly for use as draperies in places of public assembly, where ordinary draperies have proved so often to be fire hazards. Their use is restricted to places of public assembly until after the war. "Fiberglas" fireproof fabrics are not suitable for upholstery fabrics or applications where they would be subjected to friction.

"Packaged" Kitchen Cabinetry

Kitchen cabinetry is now available, in limited quantities, in single units—wall, base, sink, utility, etc., which may also be combined. It comes in hardwood, plywood, metal, etc., finished in white enamel, from the Kitchen Maid Corporation, Andrews, Indiana.

Insulating Fire Brick

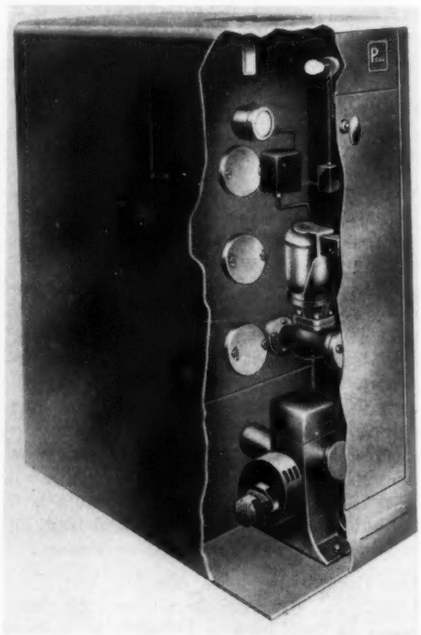
"Fireblok," a new insulating fire brick made from high quality refractory clay and a carefully graded organic filler,



is manufactured by Johns-Manville Corporation, 22 East 40th Street, New York, and recommended for use for heat-treating furnaces, flues, stacks, mains, door linings, suspended arches, and when tapered, for sprung arches of exceptional stability. It is said to be lightweight, easily cut with a saw and shaped with a rasp, and its large size reduces the number of joints, requires a minimum of mortar for bonding purposes. Available in four grades for use at temperatures from 1600° to 2600° F.

"Packaged" Heat

As soon as war contracts are fulfilled, the Penn Boiler Burner Corporation, Lancaster, Pa., say they are ready to bring to the market an entirely new line of "packaged heating units." They claim to have achieved, for the first time in the history of the heating industry, a heating unit completely factory-prefabricated and shipped ready for use; that this is made possible by extending the heavy sheet metal side of the boiler, or forced warm-air unit, to form a compartment at the front which is supported by, and is in support of, the entire unit so that no floor foundation is required; burner, controls, switches, wiring, and circulator or blower are all supported and unified within the system. The company claim they can supply a capacity-rated system that does a specified job by means of this unit.



Welded Lock Seam for Piping

Ric-wil Company, 1572 Union Commerce Building, Cleveland, Ohio, announces a reinforcing, full-welded, lock seam extending spirally the full length of each section of piping, with its helical corrugated housing for prefabricated insulated pipe units. Automatic machine weld is made at the factory before galvanizing. Sections are 21 ft. long, completely fabricated with specified pipe or pipes, insulation, and aligning pipe supports. Conduit ends are expanded smooth for a distance of 3", removing corrugations to facilitate tight field connection of sections. New drive coupler is claimed to be adaptable to mechanical

(Continued on page 104)

Pencil Points
PROGRESSIVE ARCHITECTURE

Full Employment Needs Architecture

It is not too soon to be worrying about architectural manpower. Already, architects who have commissions for postwar projects, public and private, are finding difficulty in locating enough adequately equipped draftsmen, designers, and specification writers. This is a condition that may be expected to increase.

Many trained professional men, including registered architects, are now working, quite rightly, in engineering and industrial organizations, doing their bit toward winning the still critical battle of production. Hundreds of others, possibly thousands, in the younger age brackets are in the uniformed services where they are rendering valuable technical and non-technical aid in defeating the enemy. A substantial number are working in bureaus of government at all levels, contributing directly or indirectly to the accomplishment of Victory. This is all as it should be and we are proud that architectural men have such a share in the great cause. (God knows, they had to fight to get a chance to help effectively!) But what are we going to do to get them back at the proper time into the work of peace?

This problem is an extremely important part of the greater problem our nation will face within a relatively short time—orderly and speedy reconversion to a permanent non-war economy.

To reach or even approach the goal of full employment, necessary to a stable society after the war, we will require among other things a large and sustained volume of building. This building will not conceivably be done without plans—and building plans, if they are to make sense, should be made by competent architectural men. Furthermore, it will take time to develop the plans; hence a great deal of work by architects must precede by months the ultimate large scale employment of other workers in the building industry.

This all adds up to two things: first, a need to secure political and military recognition of the principle of early selective demobilization of architectural men from the armed forces and, second, a need for the establishment of all possible means of finding men to fill the architectural jobs that will increasingly open up from now until V Day and after.

To answer the first of these needs it seems to us that the profession should, through its official employer and employee organizations, be negotiating now with the War and Navy Departments for the prompt release after the war of all architectural men who want to get back to their proper job of building a better America. It may be a long and difficult task to persuade the authorities that this is a vital first step toward national postwar stability. Architects know that it is so, but they will have to fight to get the point across to officialdom, and it is none too early to start.

As for the second need, it is safer to err on the side of doing too much than of doing too little. As we have said before, we think the A.I.A., both nationally and locally, should find ways and means of disseminating employment information. This is already being done in some centers but should be extended to cover the country. The various draftsmen's organizations already have employment services which will no doubt continue to do effective work. As our own small contribution to the solution of the problem we are re-establishing in PENCIL POINTS the employment service that we ran for a number of years, and we hope thereby to be able to convey word of opportunities and of available men to fill them from one part of the country to another. Details will be announced next month.

We direct attention to the problem at this time because we believe it is on the verge of growing acute and because unless it is solved both our profession and our country will suffer. If architecture is to come into its own, after the war, as the vital service to society we know it could be, it is up to the nucleus of architects in practice today to see to it that the way is smoothed for the return of their fellow workers dislocated by war.

Kenneth Reid

Store Designers Don't Suffer From Tradition Fixations—Thank God

Baroque Restaurant, Williams and Harrell, Architects

A store is a store is a store, and nothing more—a place where merchandise is arranged to be shown to its best advantage to prospective purchasers.

Except in exotic artists' colonies or gilded resorts, or "model" communities where the "model" is some traditional architectural style, few designers start out to make a store look like the Taj Mahal, a Nantucket windmill, or a Cotswold cottage. No, they set out to design a better store, of all things.

Why?

A few reasons are at once clear. The store, unlike some houses we could name (but won't publish), is not considered a retreat for the chosen few or the timid. Rather, the store and its ministrations are one phase of contemporary life that all accept. It is one of those rare architectural instances where all are in essential agreement, and logic rules the design! The owner wishes an attractive, comfortable place to which his customers will want to come, view his merchandise under favorable conditions, and purchase. The customer wants to go to an attractive, comfortable place where he may see what gives and, if convinced, buy. The architect can hardly resist so united a front. If he is one of the papa-knows-best designers who cannot conceive of architecture without a stylistic trademark, his lot is not happy. Because, you see, he'll have to convince not only his client but his client's customers that progressive design is bad, that gothic is good or baroque is better. When it comes to the questions "What's wrong with progressive design? What will gothic get me?" or "Why is baroque better?" he'll need clear answers. And what, pray, are they?

It is interesting, and, we think, instructive to observe that when design honestly sets out to serve the broader concept of public need—as in stores—the architecture is almost automatically progressive.

But what is this thing called store? What are the basic design considerations?

Sales as a Basis for Design

To succeed, the merchant must make certain that his wares sell and that his shop is sufficiently reputable so that a good proportion of initial customers become regular customers and recommend the store to others. Anything that makes this merchandising mechanism work more smoothly is desirable—provided its cost is covered (plus a profit) by the increased sales due to the improvement. If the architect can show him how he can step up sales through planning, design, or equipment, the merchant is likely to become a client without further discussion.

To do this, the successful store designer must be not only a student of merchandising methods and of the buyer's psychology, but also a researcher into the potentialities of materials and equipment. There could hardly be a better basis for progressive design, provided of course that the term "merchandising methods" is understood to be broad enough to include esthetics, consideration for the customer, and consideration for the neighborhood. Progressive merchants—usually the successful ones—recognize the value of such a broad definition; that is one reason why there are so many excellent stores in America.

Merchandising Methods

After the selection of stock, determination of price policy, etc., which are the prerogative of the merchant, the store designer's job begins. The stock must be attractively displayed; the display, in combination with the design of the store, must invite the buyer inside; the interior, in which display remains important, must be attractive and comfortable enough to induce a receptive attitude in the buyer; and the whole store must be economical to maintain, as well as efficient in plan and equipment, so that the merchant can serve the customer without loss of time or money.

By now it has become almost axiomatic that the entire store front—often the whole building facade—is treated as a display element. As it is a permanent advertisement of the store, obviously, the more attractive it is, the better for the merchant, for the customer, for the appearance of the street. The senseless competition of designless signs, crowded show windows, etc., persists in those urban shopping areas where price levels are low; but even here reforms are creeping in. Some chain bakeries, for example, have accepted good design as a factor contributing to increased sales; some drug stores have begun to follow suit; the shoe repair man works in a linen duster and has neat booths for waiting customers.

From the foregoing, two significant facts emerge:

1. There is practically no store owner to whom sound architectural advice cannot be advantageous.

2. If he has a thorough knowledge of merchandising methods and buyer psychology, the designer has an almost limitless field in which to develop profitable work.

Of course, the advice has to be sensibly geared to the merchant's problems and not to some arbitrary standards of historic style or preconceived notions. In this connection, it is interesting to note that all the important advances in store design were originally the work of architecturally trained men.

Ever since the successful merchant first learned that progressive store design "produced results," advance has been limited only by the designer's ability and the characteristics of available materials and equipment. Large department stores have employed architectural

Stoller

Interior, Dana Shop, Morris Ketchum, Architect—a narrow shop apparently widened by a mirror wall

men of high caliber to re-plan their establishments; such stores further required—and obtained—the fillip of personal expression that would distinguish their way of doing things from all others. And a whole new field for the designer opened up when nation-wide store chains, recognizing the benefits which good architecture brings, employed designers on a permanent basis.

For those who complain that the architect is not appreciated, that his services are undervalued, the field of store design offers challenging rebuttal. His services are not only appreciated, but demanded—and well rewarded, too—when he proves clearly that his services have value, when he knows how to talk in terms of dollar return, rather than solely in the more refined, but less understood, language of beauty or fine art—or even in the gobbledygook of "imposing architecture."

This, we think, is a useful observation to ponder.

The Customer

Consideration for the customer is a rational part of the program. Only if the customer is satisfied to remain in the store can sales be made. (With today's number of competing stores the era of relying on merchandise alone as the attraction has passed.) This matter of customer relations involves several design functions, among them the organization of merchandise into an orderly, departmentalized whole, where it is easy to find the particular item desired, and where additional items can be so displayed that the customer is at least induced to look at them. In this phase of design the true architect finds useful a talent which he, above all others, possesses: the talent for organization. Many store owners have been rendered disservice by individuals and organizations which sold them miles of "fixtures" to be arranged in inorganic rows; this is not architectural service, though it is often so called. A really architectural arrangement provides a succession of departments, each small enough so that the customer feels at home and comfortable in it. This type of planning requires of the designer a thorough knowledge of the client's policies and stock, and almost always results in a thoroughly individualized store. However it is handled, it is essential in order to avoid confusing the customer and to increase the efficiency of the merchant's operations.

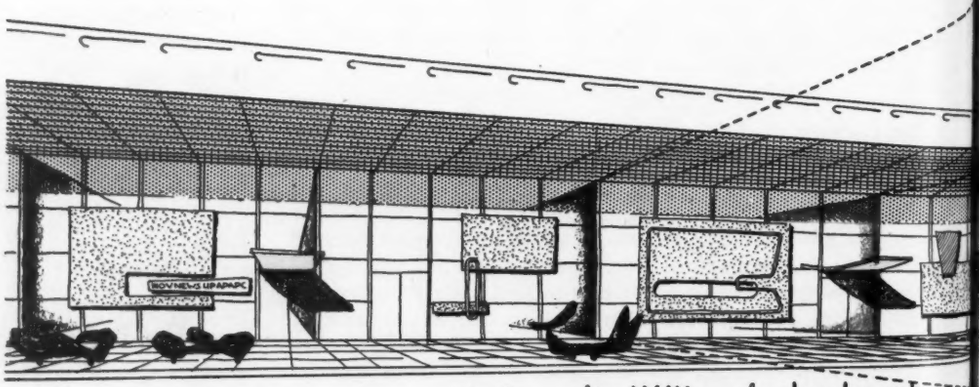
Mechanical Equipment

Lighting, air conditioning, acoustic treatment, heating, etc., have dual roles. They can be used to enhance or protect the merchandise, thus aiding in display; and they can increase the customer's satisfaction with the store in general, thus helping to induce a will to buy. A detailed discussion of these mechanical factors is contained in John M. Hatton's article on page 72.

In This Issue

The greater portion of this issue is devoted to store designs, most of them speculative, and most of them done for the Pittsburgh Plate Glass Company, whose desire for well designed subjects to use in promoting their store front materials led them to employ the best architectural talent they could discover. It seems highly commendable that a large corporation should be willing to pay adequate fees for ideas which can benefit the merchant and the creator of store architecture. Obviously it can help the corporation, which has been wise enough to understand that by obtaining the best design assistance available it stood to gain the most. Incidentally, the drawings were released for publication in PENCIL POINTS without qualifications; and when space limitations made it apparent that only a portion of the drawings could be presented, the judgment of the editors was the sole criterion for inclusion. Most of the comments on the projected designs are the architects' own, indicated by quotation marks. In some cases, however, editorial remarks have been added.

. . . how would you like to go to market in a shopping district built under one roof . . . . . as compact convenient central as the ancient market-place . . . . . here is a modern mainstreet combining the virtues of the old market-place with the contemporary principles of air-conditioning flexibility space control.



6 ft. modular facade — — showing flexibility of treatment

Eliel Saarinen

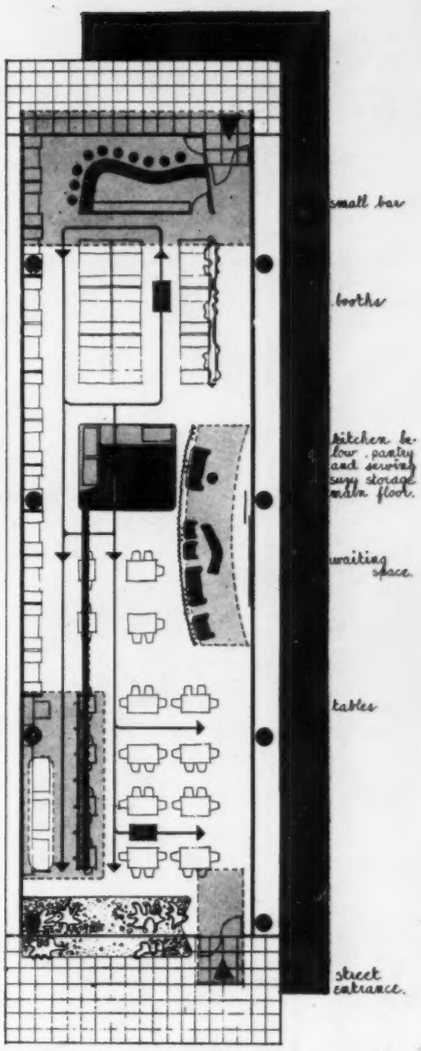
Eero Saarinen

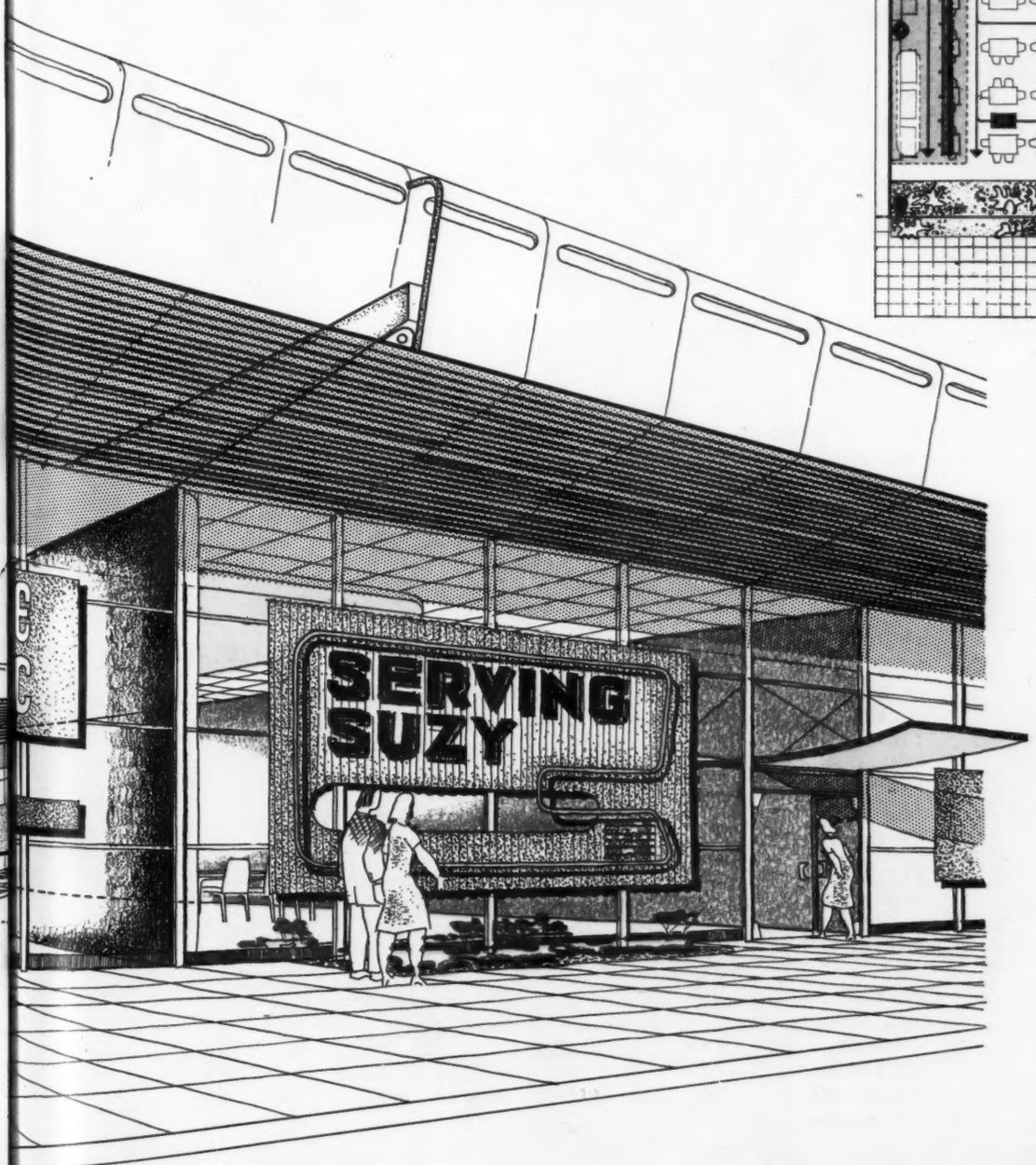
J. Robert F. Swanson

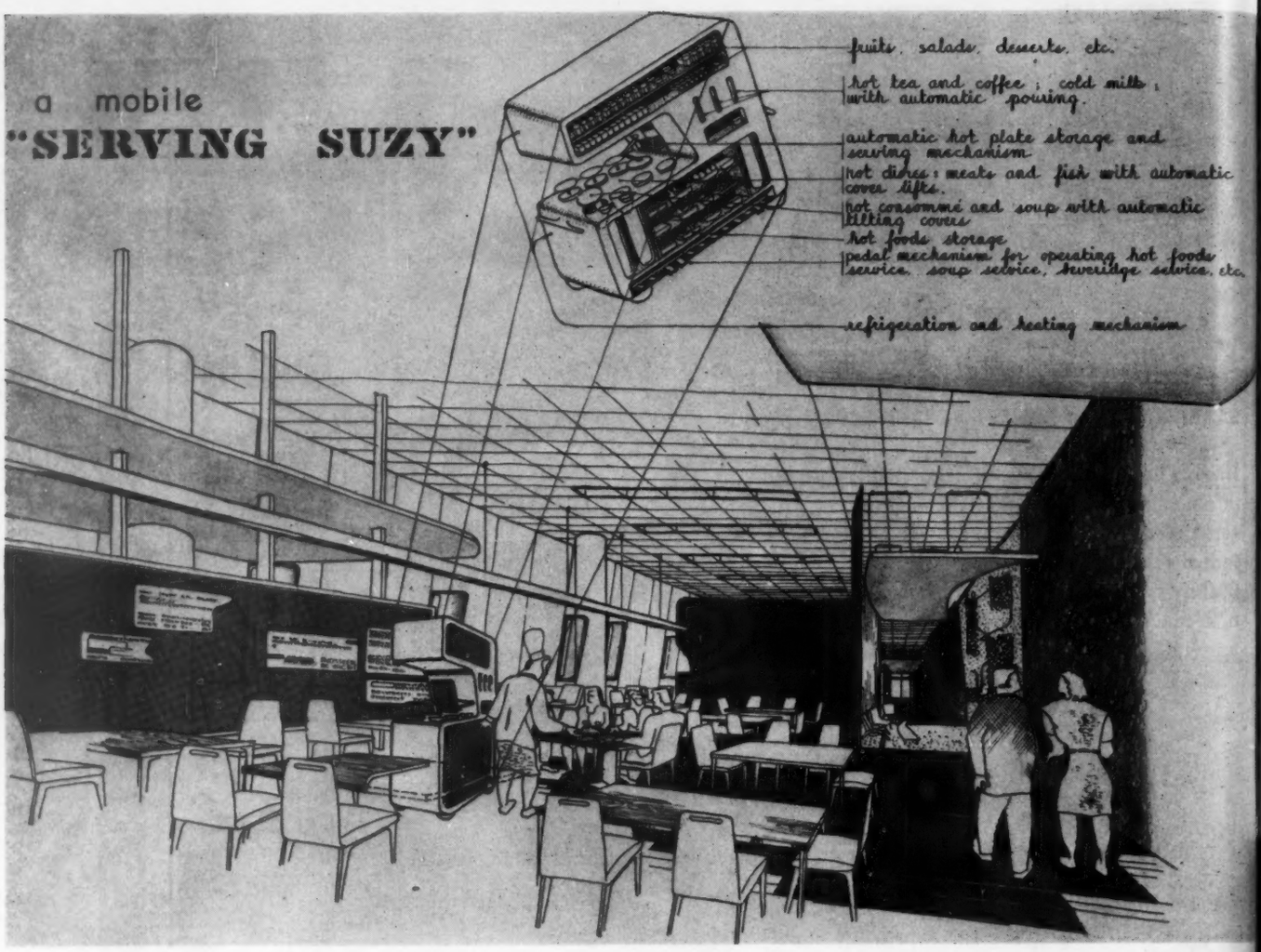
Restaurant

SAARINEN AND SWANSON, ARCHITECTS

In this imaginative restaurant plan, schemed as a unit of a complete, under-one-roof shopping district, the cafeteria comes to the customer rather than vice versa. As indicated in the drawing on the facing page, this great building of shops is conceived as but a major element of a much larger community center in which civic, commercial, and residential areas are all integrated.






a mobile
"SERVING SUZY"
fruits, salads, desserts, etc.
hot tea and coffee; cold milk; with automatic pouring.
automatic hot plate storage and serving mechanism
hot dishes: meats and fish with automatic cover lifts.
hot consommé and soup with automatic tilting covers
hot foods storage
pedal mechanism for operating hot foods service, soup service, beverage service, etc.
refrigeration and heating mechanism

SAARINEN AND SWANSON, ARCHITECTS

The architects comment: "The basic theme of the restaurant was developed to fit into a general community shopping center. The restaurant is planned as a part of this shopping center which is entirely enclosed, with parking areas both on the roof and at ground level.

"By the use of a super-serving device, it would be possible to simplify the service and let each customer actually see the food he is ordering and have it served, while avoiding the necessity of standing in line as in a cafeteria."

Another advantage derived from the Serving Suzy is that customers can come in and sit down at available places without encountering the common cafeteria difficulty of finding oneself all equipped with a loaded tray and no place to put it. Perhaps a yet further refinement might be to make the Serving Suzy a sort of small, noiseless, electric-powered jeep, in which the chef alternately goes full speed ahead, turns around on a dime, applies the brakes, and slices the roast. If there were more than one Suzy in the restaurant, however, it might be necessary to institute one-way traffic rules. Need we say that the Serving Suzy intrigues us?

For the rest, the scheme seems to be an entirely logical disposition of standard areas—entrances at both front and rear, a choice of booths or freestanding tables, a waiting lounge intelligently placed on center and screened from the restaurant proper, a small bar at the rear. Like most of the stores shown in this section, the architects have thought of the whole retail unit as the thing to be displayed to the passerby and potential customer. Hence the front wall is of clear glass, and a planting area both inside and out tends to unite the restaurant with its surroundings.

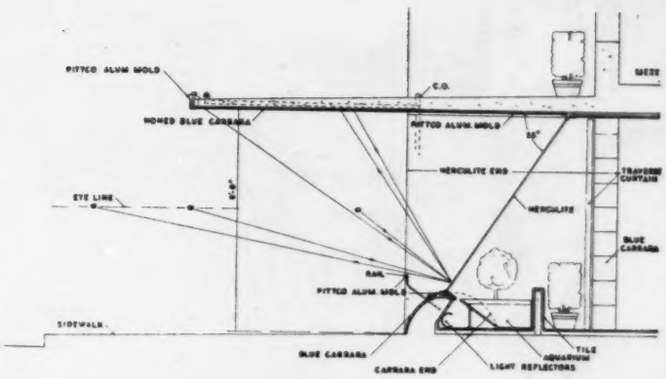
Restaurant

IGOR B. POLEVITZKY, A.I.A., ARCHITECT

"The design was based on the premise that an inviting restaurant interior is its best possible display. Consequently, the creation of an attractive, restful interior was the primary design consideration. An informal, garden-like area was created through the use of a rough brick wall, quarry tile floor, profuse interior planting and freestanding decorative glass partitions, the latter forming private alcoves. Low intensity lighting, important for relaxation and intimacy (and, incidentally, flattering to women diners) is achieved through the use of ceiling diffusing units as well as individual table lamps which may be plugged in anywhere through provision of continuous built-in floor plug-in strips.

"Outdoor dining is provided on the second floor; this area, however, may be thrown into the enclosed interior during cold weather by rearranging the moveable glass panels around the balcony.

"The problem of making this interior as co-extensive with the street as possible is solved by the use of an invisible flat glass-front window, which, by eliminating all reflections, removes every vestige of barrier between the pedestrian and the interior. . . ."



STORE FRONT SECTION

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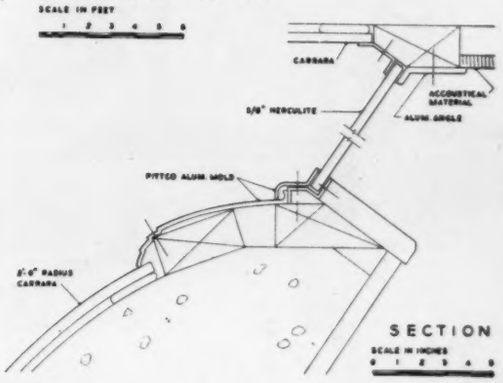
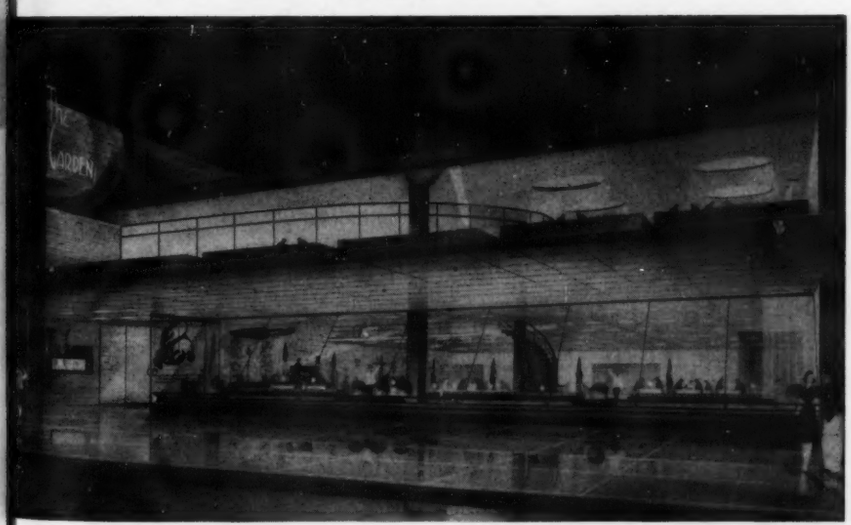
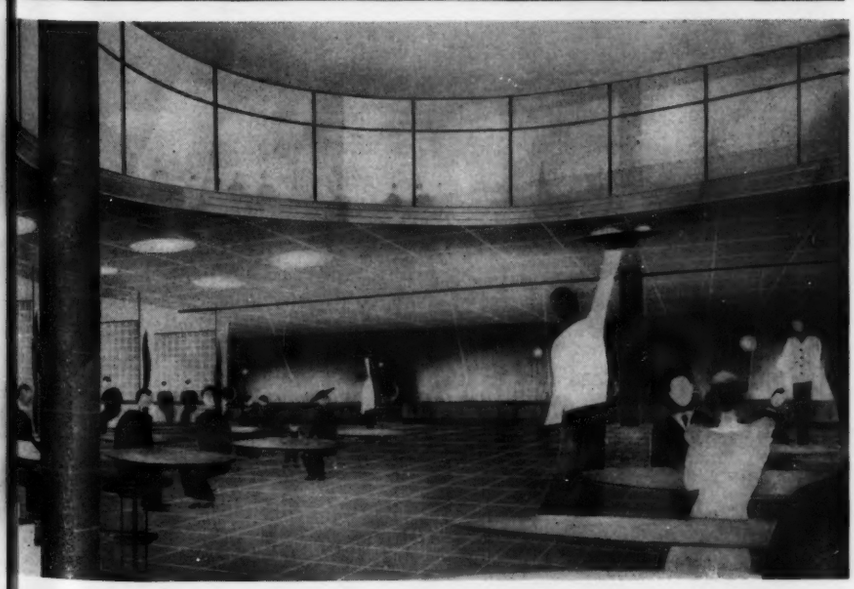
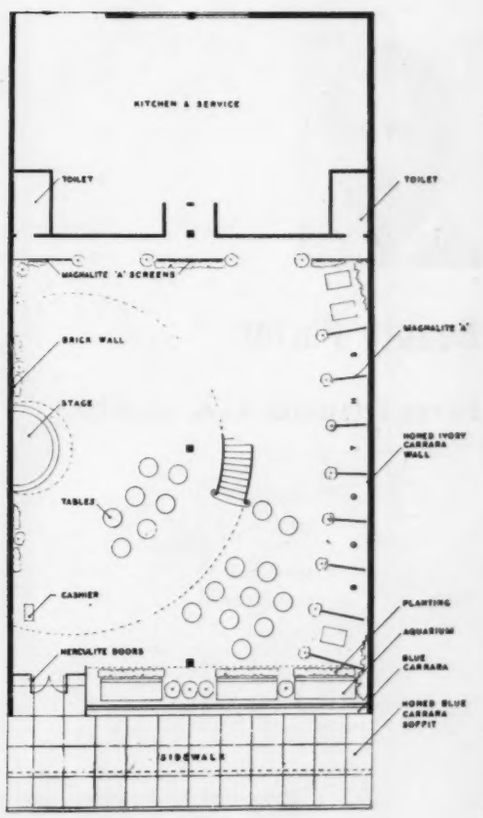


SECTION

SCALE IN INCHES 0 1 2 3 4 5 6







FIRST FLOOR PLAN

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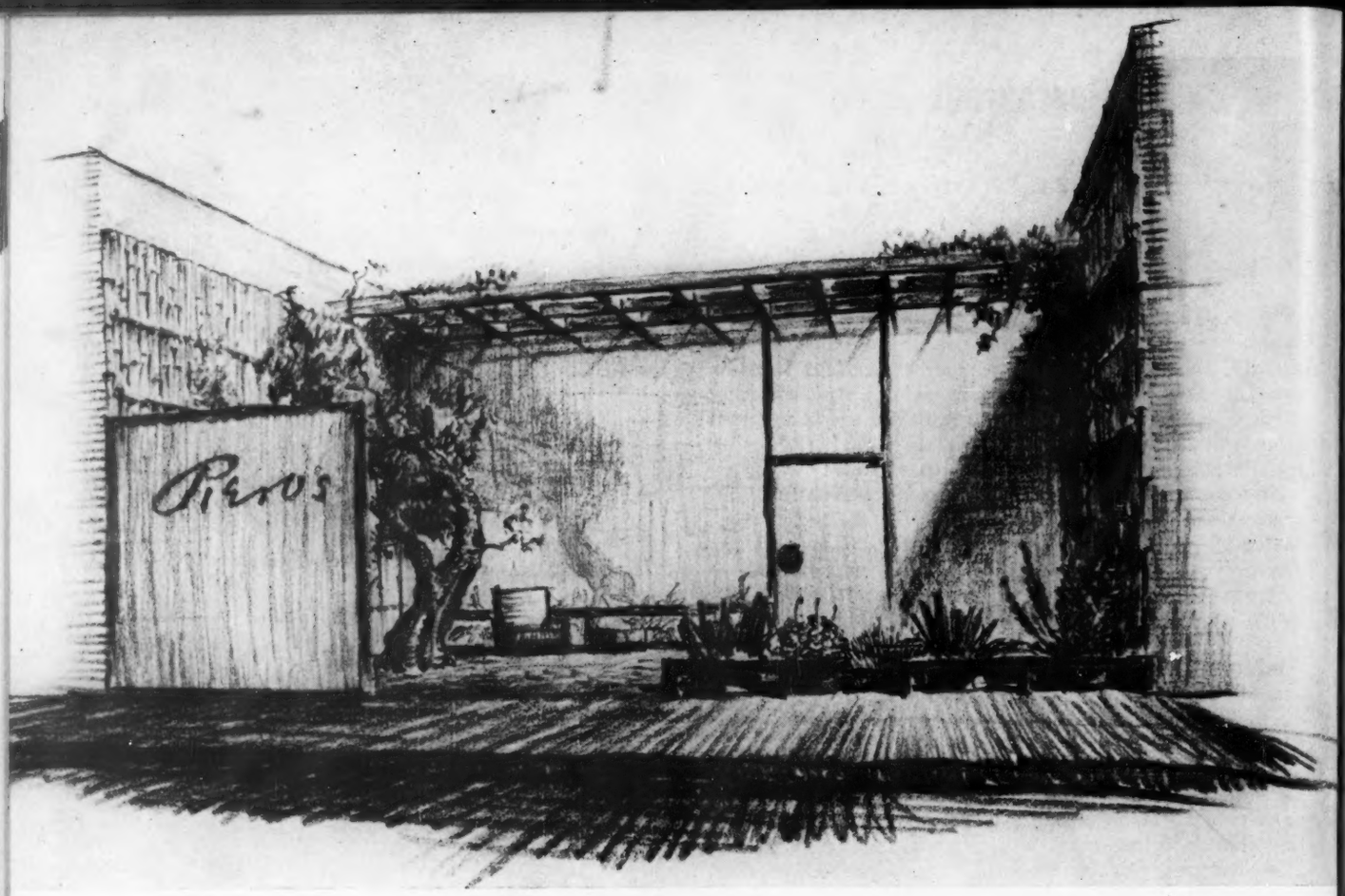


Beauty Parlor

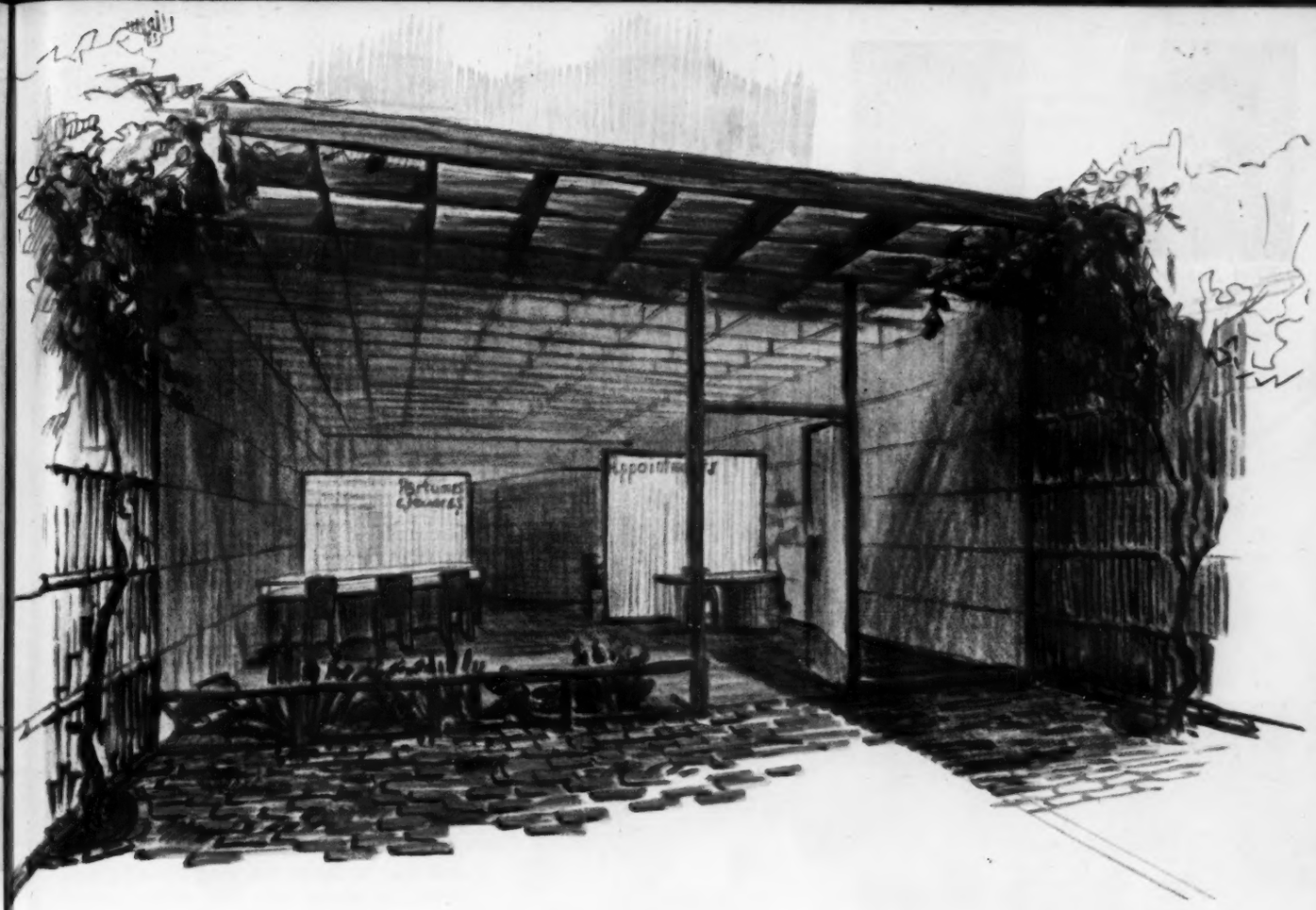
PIETRO BELLUSCHI, A.I.A., ARCHITECT

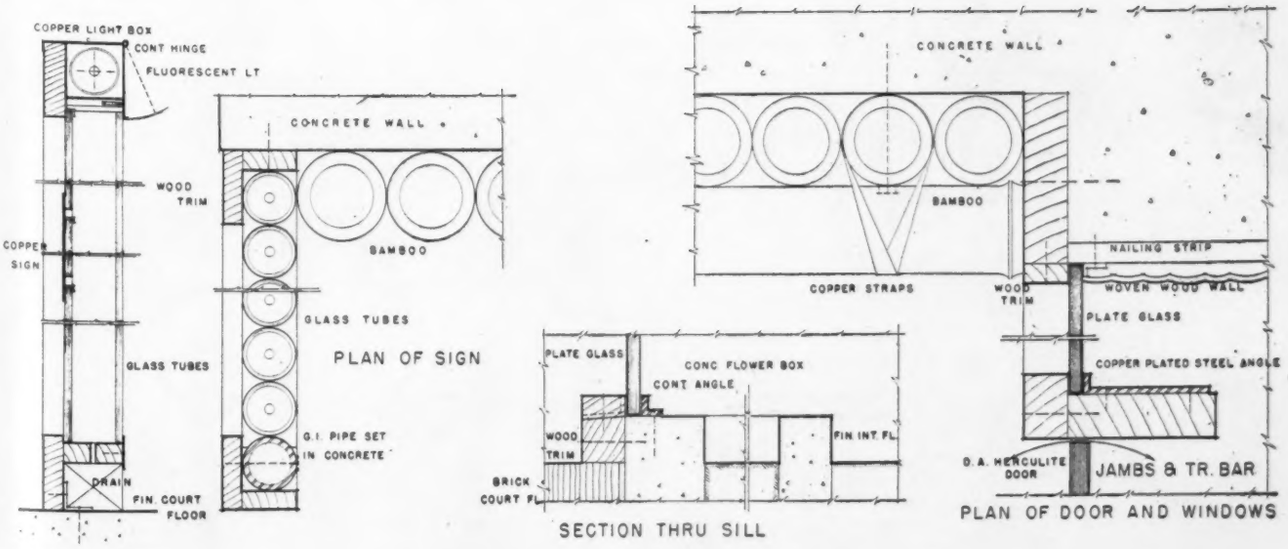
"This plan was developed with the desire of making its invitation to the potential customer more subtle than that of surrounding shops of other types. To accomplish this purpose, a garden forecourt was provided. This could be landscaped to harmonize with climatic conditions of that part of the country in which the shop is built.

"The plan also seeks to present as complete beauty-salon facilities as possible, even to inclusion of a solarium which may be either naturally or artificially lighted. However, the scope of the services offered could easily be altered without impairing the basic organization of the various units."

The forecourt, which in fine weather would make an unusually pleasant outdoor waiting room, is not the only untypical provision. In the hair-cutting department, the design includes a soft-drink bar. This novel suggestion would undoubtedly pay its way as a much-talked-about attraction, at the same time serving a very practical purpose during the rigors of the beautification process. For the rest, the facilities seem to be fairly standard units, organized for the efficiency and comfort of both clientele and employees.

The sign panel of glass tubing framed in wood suggests lettering in copper; as a textural contrast, the forecourt wall alongside is surfaced with a bamboo screen. Behind the front wall of the shop proper, which is largely of plate glass, a plant box is provided that carries the planting theme of the forecourt directly into the interior space.




COPPER LIGHT BOX
CONT HINGE
FLUORESCENT LT
WOOD TRIM
COPPER SIGN
GLASS TUBES
DRAIN
FIN. COURT FLOOR
CONCRETE WALL
BAMBOO
GLASS TUBES
G.I. PIPE SET IN CONCRETE
PLAN OF SIGN
SECTION THRU GLASS SIGN
CONCRETE WALL
BAMBOO
COPPER STRAPS
WOOD TRIM
NAILING STRIP
WOVEN WOOD WALL
PLATE GLASS
COPPER PLATED STEEL ANGLE
D.A. HERCULITE DOOR
JAMBS & TR. BAR
PLAN OF DOOR AND WINDOWS
PLATE GLASS
CONC. FLOWER BOX
CONT ANGLE
WOOD TRIM
FIN. INT. FL.
BRICK COURT FL.
SECTION THRU SILL
0 1 2 3 4 5 6
SCALE IN INCHES FOR ABOVE DETAILS
PLAN
SCALE IN FEET
0 2 4 6 8 10

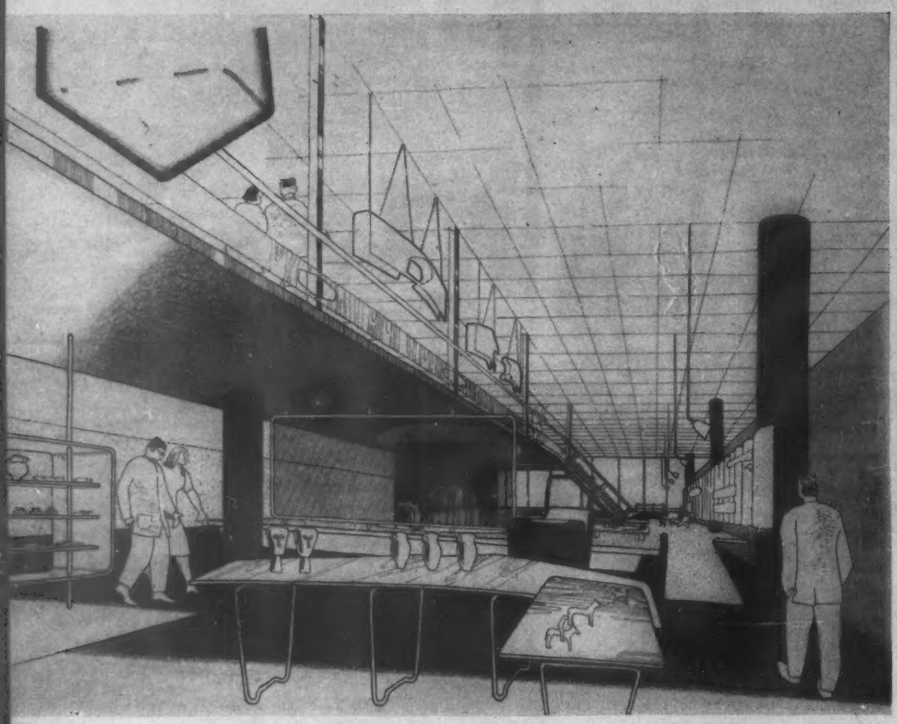
Eliel Saarinen

Eero Saarinen

J. Robert F. Swanson

Gift Shop

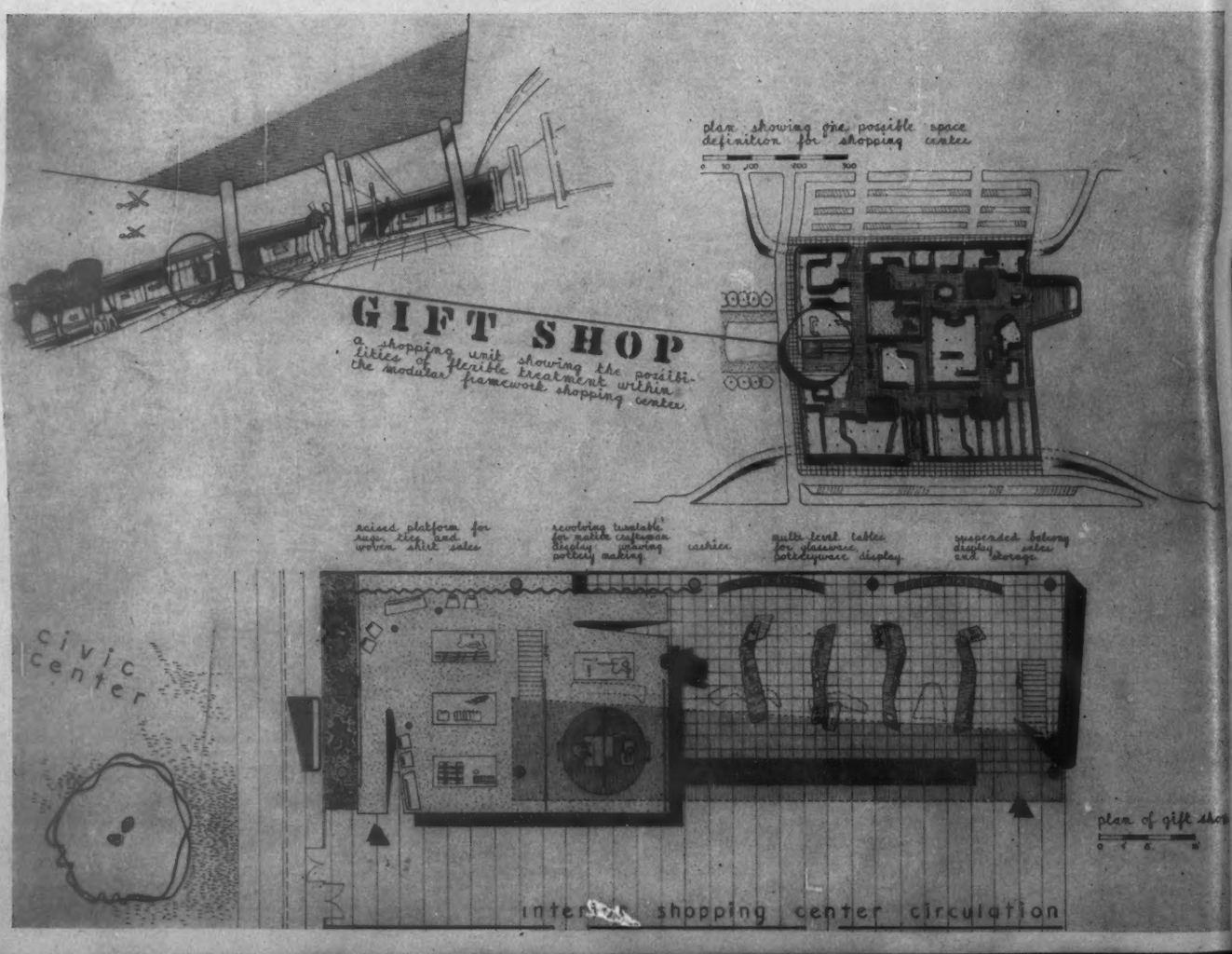
SAARINEN AND SWANSON, ARCHITECTS



A retail unit of a huge, under-one-roof shopping center, similar to the one for which the same architects designed the restaurant shown on Pages 42-44, this gift shop uses the device of different floor levels, separated by ramps, for display of different types of merchandise.

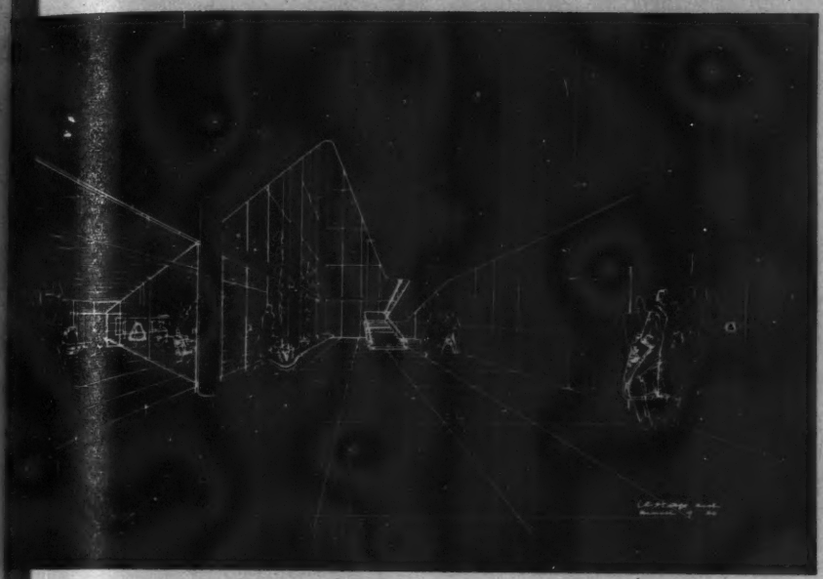
The raised platform area is reached by two ramps, one from the entrance door, and the other, up from the main floor, near the cashier's desk. A clever display idea for this department is a revolving turntable on which craftsmen may be viewed at work.

The lower sales level has a series of multi-level, irregular-shaped display tables for pottery, glassware, and the like. Suspended above one wall of the shop, a balcony provides additional sales and display space. Both front and rear walls of the shop are of glass, inviting views of the whole space from both of the entrances.


GIFT SHOP
a shopping unit showing the possibilities of flexible treatment within the modular framework shopping center
plan showing one possible space definition for shopping center
raised platform for sweaters, knit and woven shirt sales
revolving turntable for native craftsmen displaying painting pottery making
cashier
multi level tables for glassware pottery ware display
unenclosed balcony display, sales and storage
civic center
plan of gift shop
interior shopping center circulation

Theater

WILLIAM LESCAZE, A.I.A., ARCHITECT



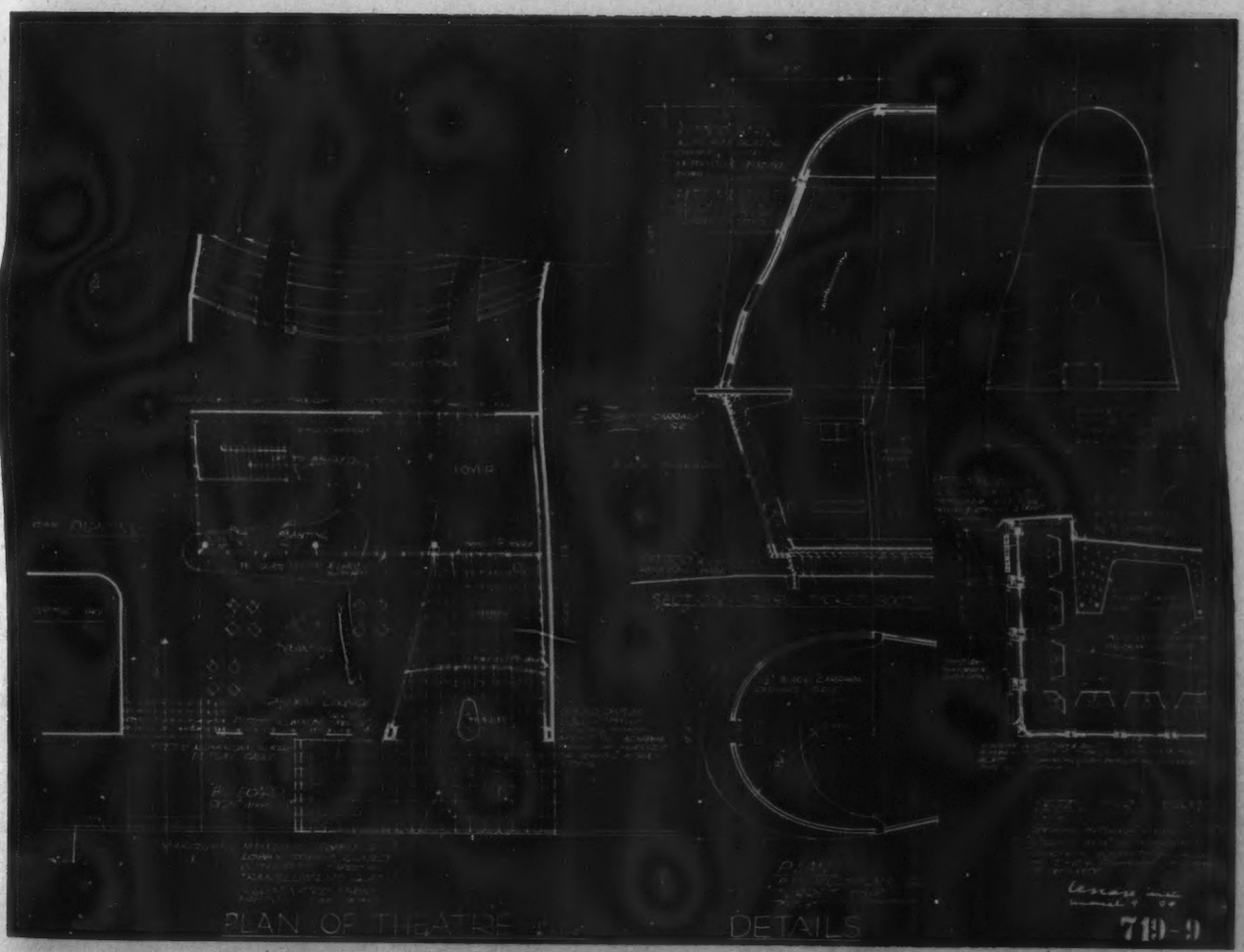
"In this design, various types of glass and lighting have been organized to give the entire building front a distinctive and theatrical appearance.

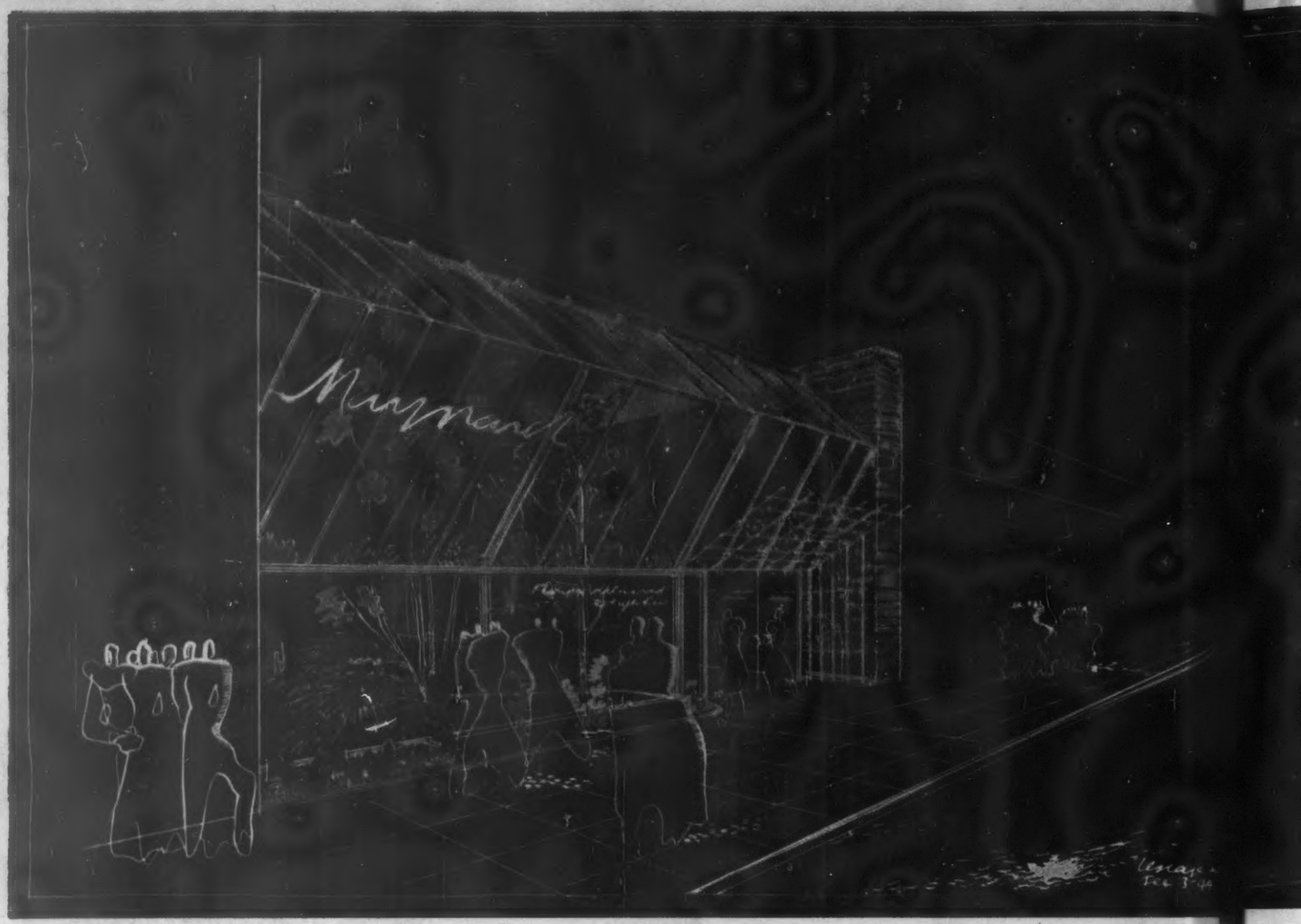
"The marquee and sign panel are of illuminated tapestry glass. This unit constitutes an advertising device that is both flexible and striking.

"As yet a further display medium, the use of four-color photographic transparencies is suggested.

"The ticket booth is designed with a 'turret top' of heavy, safety plate glass. Thus, the ticket seller commands visual control of the entire theater lobby.

"At the left of the entrance, a garden lounge is provided, set off by a glazed 'trellis screen'; the adjoining walls of the lobby and foyer are of clear glass. The thought is that this lounge would be used both for light refreshments and as a waiting room for theatergoers whose cars are being parked."





Florist Shop

WILLIAM LESCAZE, A.I.A. ARCHITECT

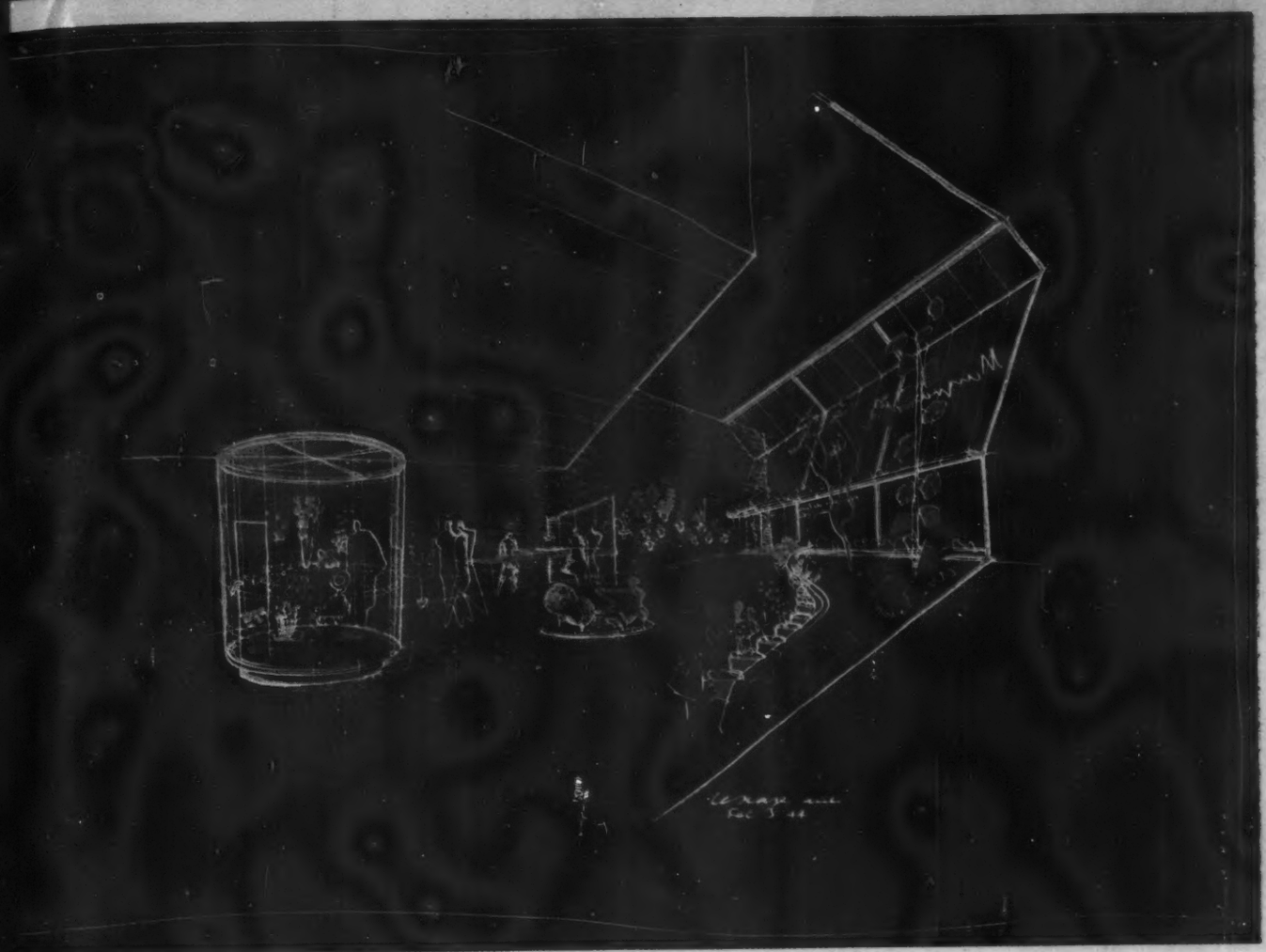
"The feature of this florist shop is the use of glazing details that are recognizable as those universally typical of greenhouses. In addition to providing a completely transparent front, this gives the structure an unmistakable garden character.

"Important and integral parts of the design are the sun control devices, window lighting, and the advertising signs.

"A trellis surrounds the entrance. Within the store, the garden character of the shop is carried out by means of a pale green mirror located behind the flower garden area, which reflects both the flowers and the natural fieldstone wall opposite.

"The focus of the interior of the shop is the circular cut-flower display refrigerator, equipped with revolving trays.

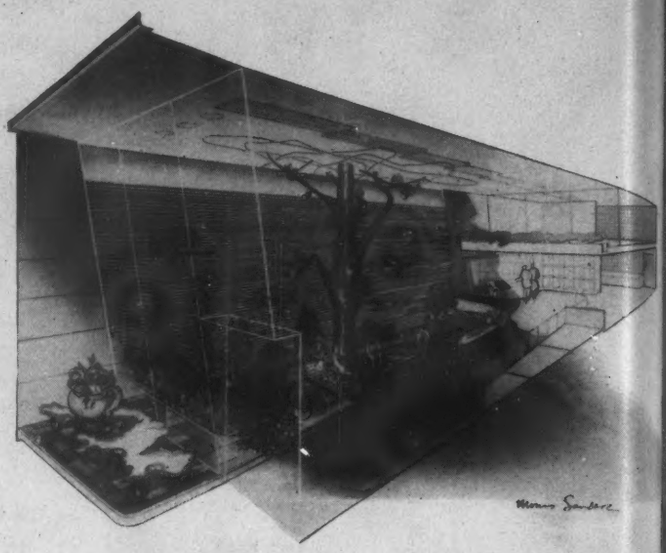
"The interior of the store is lighted from lamps installed above the tapestry glass, translucent ceiling."



PLAN
DETAIL

Florist Shop

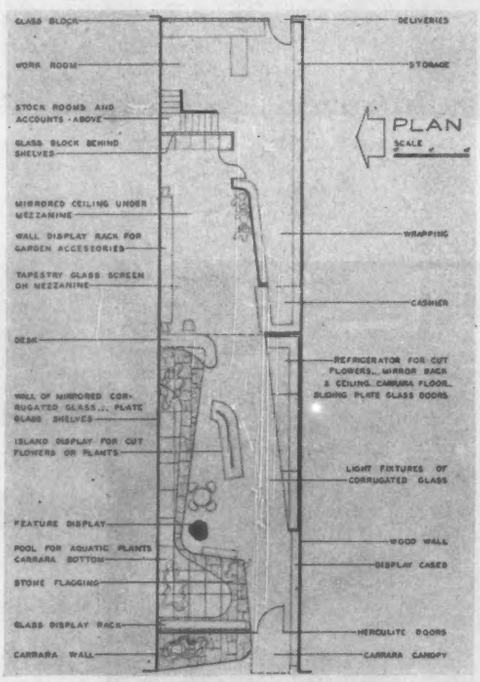
MORRIS SANDERS, A.I.A., ARCHITECT

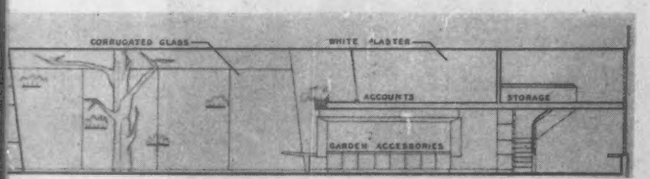


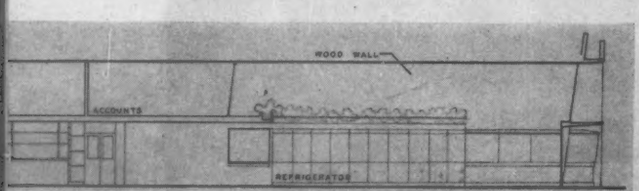
"In the contrast between glass and natural foliage, between a uniform, brilliant, man-made material and a host of irregular and yielding natural forms, we found our major design theme. To make the most of this contrast, we felt a design need for the brilliance of polished plate, the rich diffusion of figured glass, and the somber quality of polished, pigmented structural glass. As a counterpart to the theme, we employed coarse slate and wood.

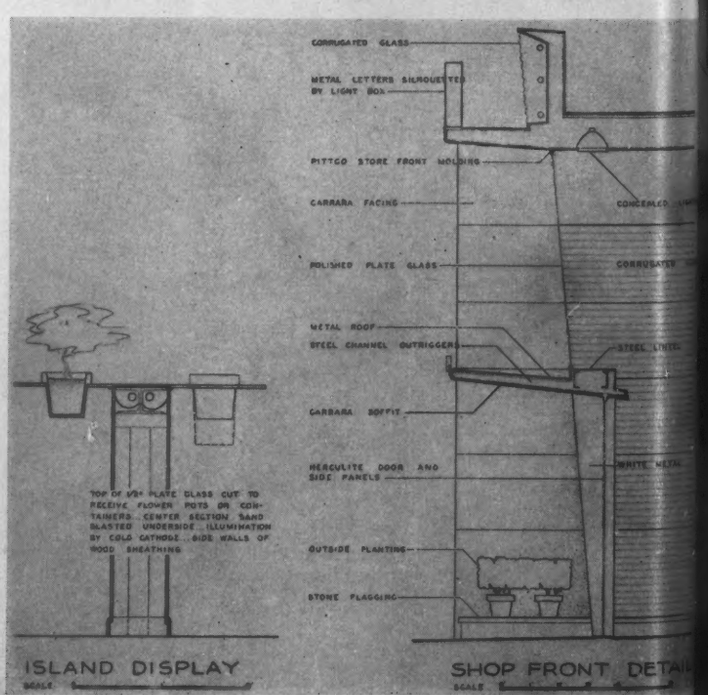
"Where a doubling of apparent space and wares seemed important, we indicated true mirrors; where we needed a feeling of airiness, sparkle, and an enhancement of merchandise, we chose mirrored corrugated glass. Glass block worked in well as a luminous background for our garden supplies department and as a practical partition between shop and workroom.

"The conventionalized tree was introduced as a focal piece, serving as a flexible display unit for bouquets and for adjustable spot lights. We indicated green cold cathode lighting to suggest upper foliage and glass mosaic as a surfacing for the 'tree' itself."








CORRUGATED GLASS
METAL LETTERS SILHOUETTED BY LIGHT BOX
PITTCO STORE FRONT MOLDING
CARRARA FACING
POLISHED PLATE GLASS
METAL ROOF
STEEL CHANNEL OUTRIGGERS
CARRARA SOFFIT
HERCULITE DOOR AND SIDE PANELS
OUTSIDE PLANTING
STONE FLAGGING
TOP OF 1/2" PLATE GLASS CUT TO RECEIVE FLOWER POTS OR CONTAINERS. CENTER SECTION SAND BLASTED UNDERSIDE. ILLUMINATION BY COLD CATHODE. SIDE WALLS OF WOOD SHEATHING
ISLAND DISPLAY
SCALE
SHOP FRONT DETAIL
SCALE

Robert Allan Jacobs

Service Station

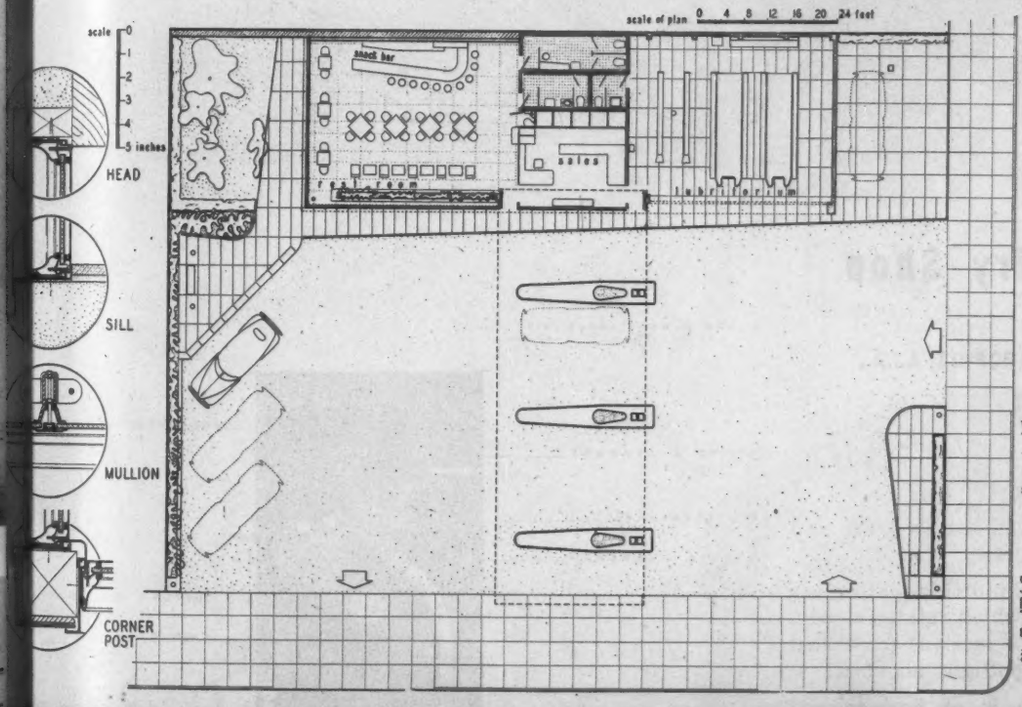
ELY JACQUES KAHN, ROBERT ALLAN JACOBS, ARCHITECTS

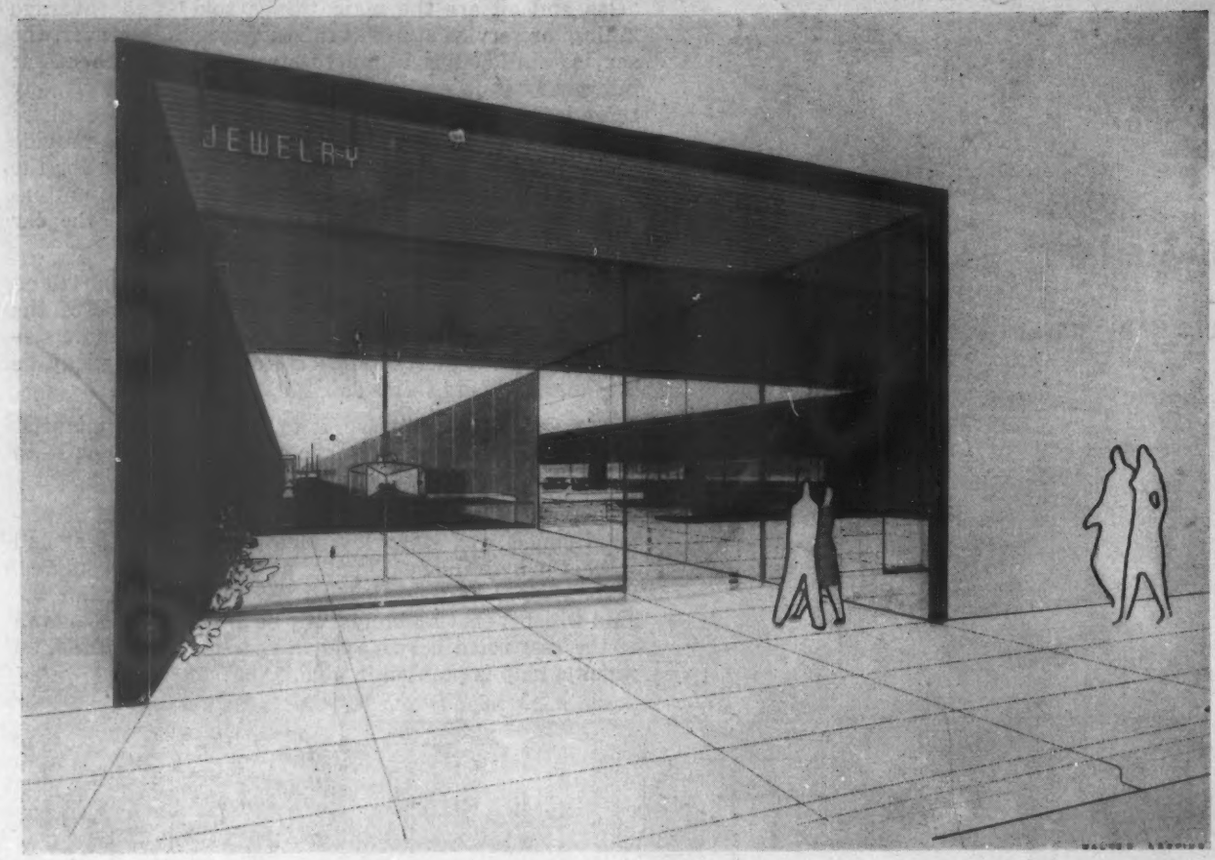
"Gas and oil are the main things sold at the average 'filling' or service station. In recent years, however, the service station has begun to stock other merchandise; but rarely is it designed to invite one inside. Usually there is space for but one car under cover and the others stand out in the open. The attempt here is to provide covered space for all cars, with sheltered access for the passengers to the rest room and for service station attendants from the lubratorium or sales office to the car itself.

"The powerful motif of the 'airplane wing' supported on hollow metal piers could become the trademark of the particular oil company which operates the chain of service stations. Like the station itself, it could easily be prefabricated and shipped.

"The idea of the snack bar is to encourage the motorist to relax en route rather than to dash in and out—an idea which would surely be reflected in sales.

"Stock garage doors are used with glass instead of plywood panels. This provides plenty of natural light and shows the hydraulic equipment at work from the outside. Plate glass is used on the rest room and sales room, behind which Venetian blinds may be drawn. The rear wall of the rest room is surfaced in red structural glass, on which a map is painted in gold."





Jewelry Shop

WALTER GROPIUS, A.I.A.,
ARCHITECT

"The recessed front glass wall avoids glare and provides shelter for spectators.

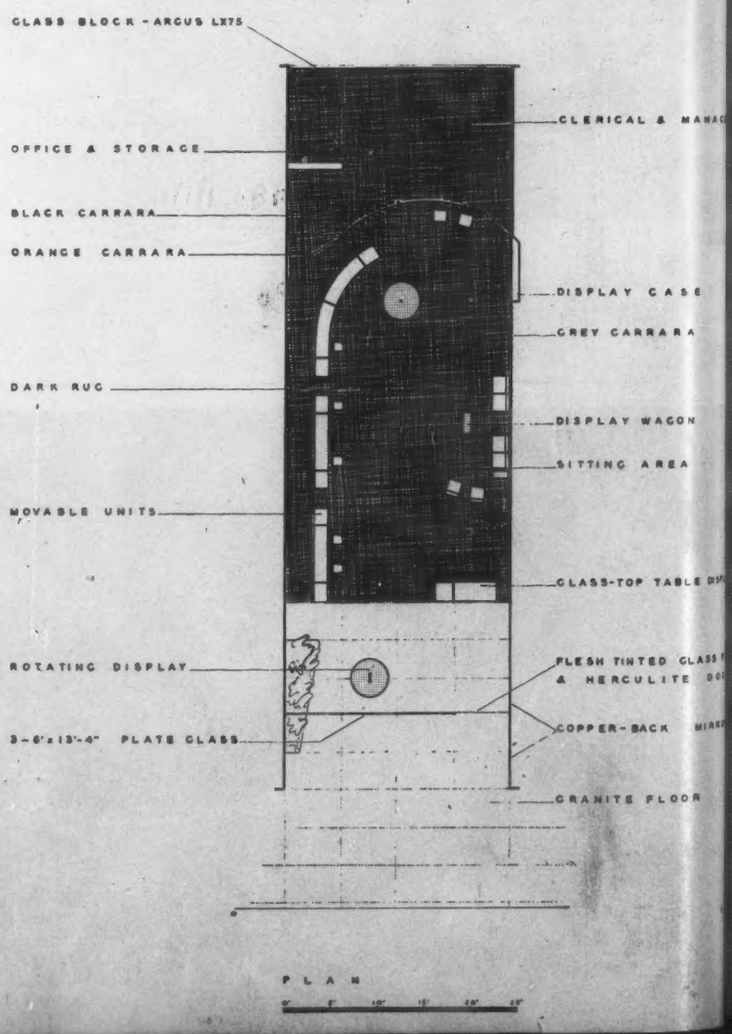
"In the area immediately behind this plate glass panel is a circular showcase which rotates slowly. Jewelry displayed in the case receives controlled light-sparkle from a fixed spotlight above it.

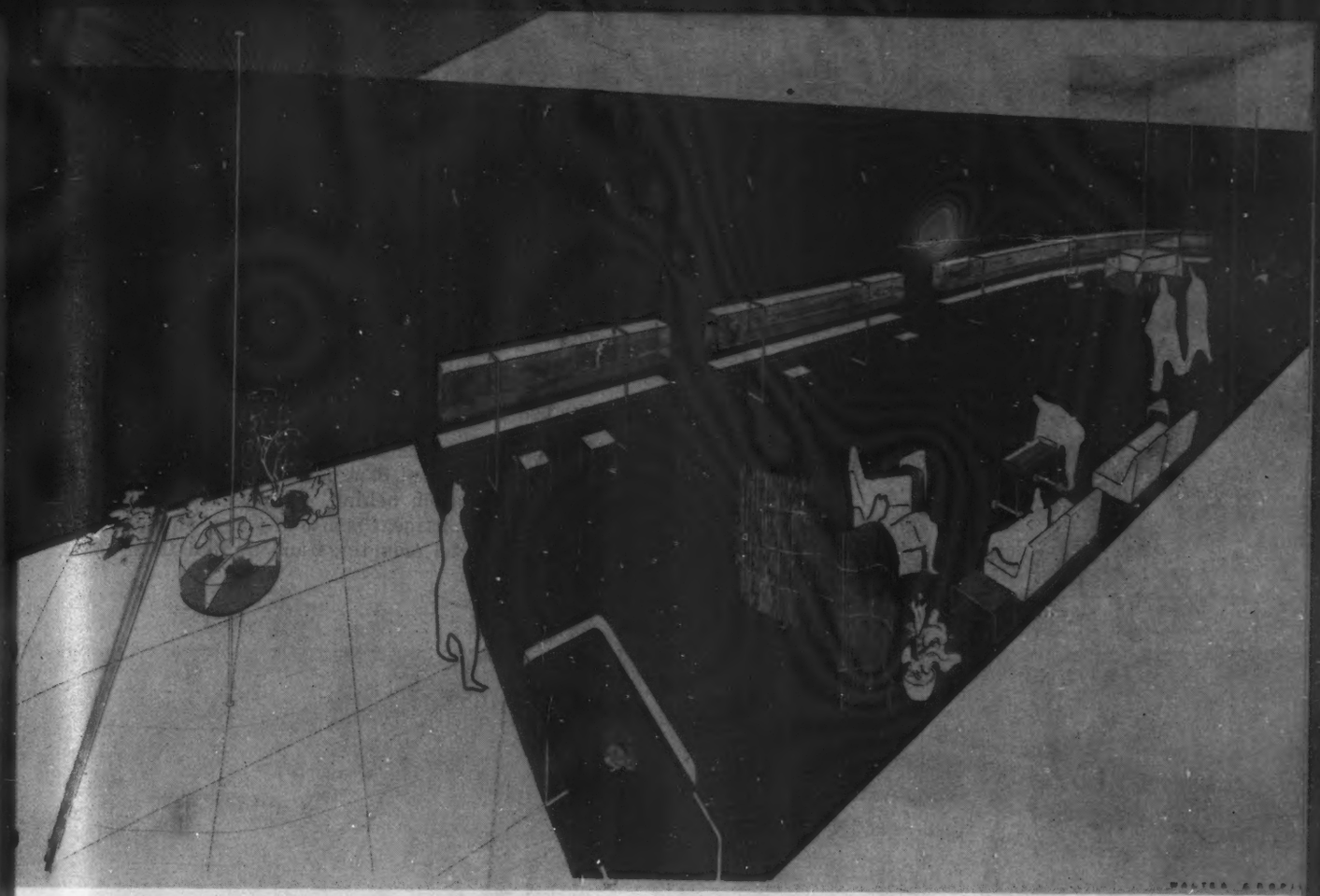
"The entrance door section is of flesh-colored plate glass, while the side wall to the right is of plate glass mirror, giving the illusion of a double-width entrance lobby.

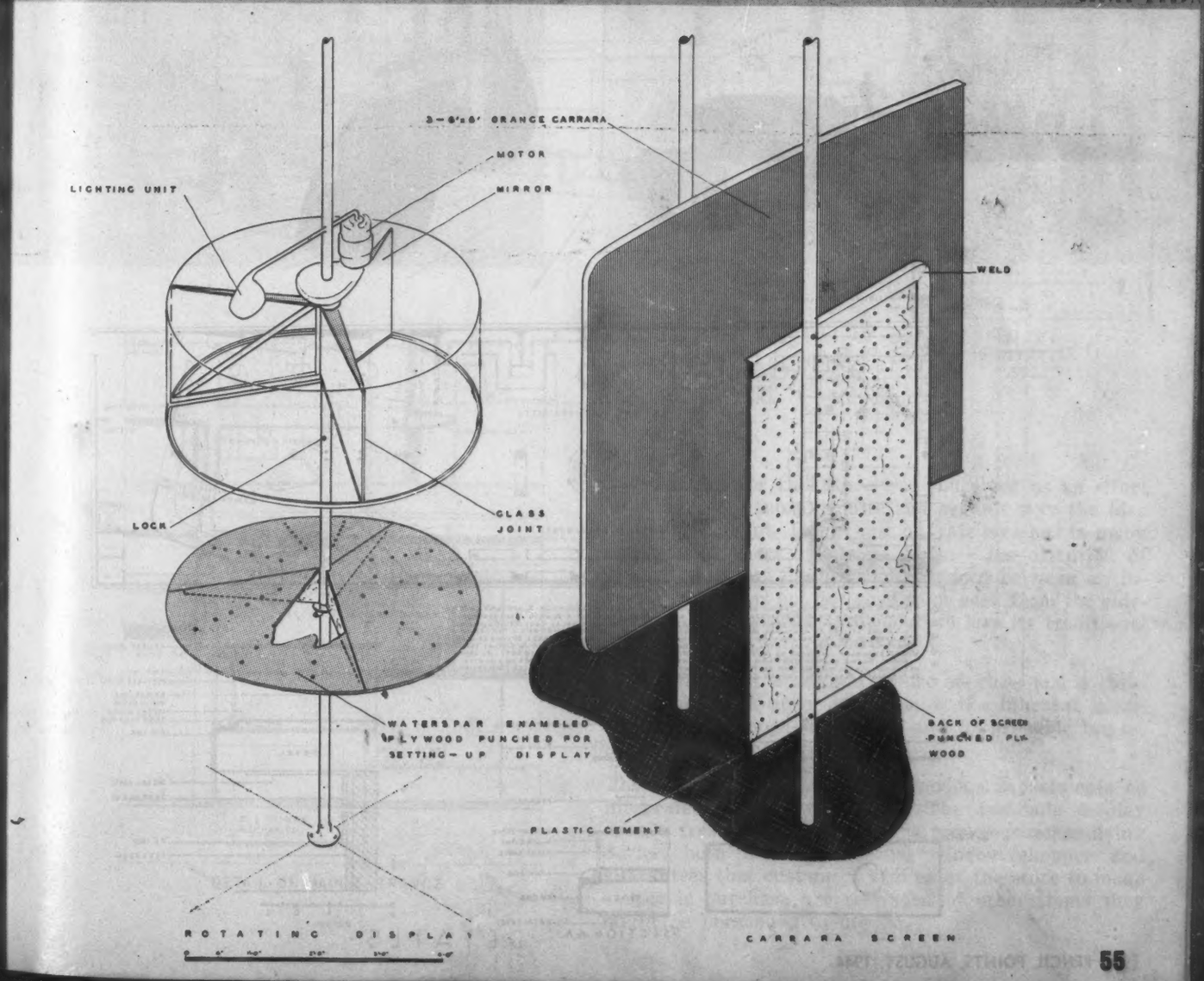
"The left-hand interior wall is of suede-finish black structural glass, which provides an effective background for jewelry display. The opposite wall is of polished gray structural glass.

"At the far end of the shop, a bent glass screen of metal-framed polished orange structural glass is supported by chromium-plated metal pipes.

"All jewelry displays are invisibly spotlighted from the upper edges of the showcases."






3 — 6'x8' ORANGE CARRARA
MOTOR
MIRROR
LIGHTING UNIT
WELD
GLASS JOINT
LOCK
WATERSPAR ENAMELED PLYWOOD PUNCHED FOR SETTING — UP DISPLAY
BACK OF SCREEN PUNCHED PLYWOOD
PLASTIC CEMENT
ROTATING DISPLAY
CARRARA SCREEN

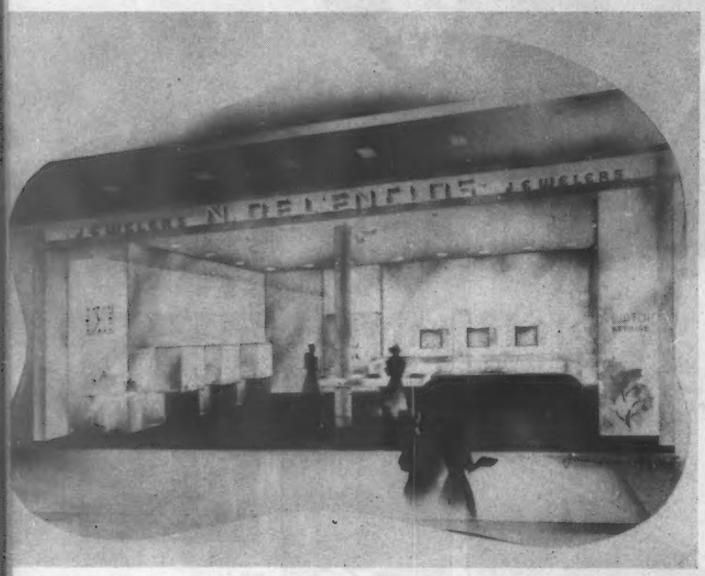
Jewelry Store

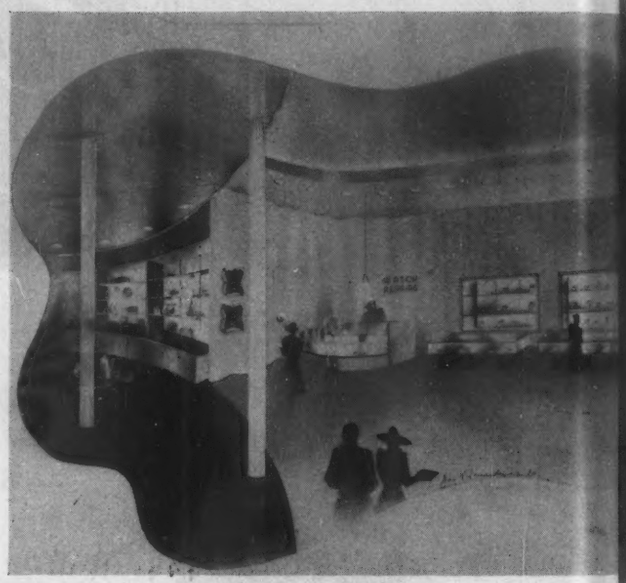
JOSE A. FERNANDEZ, ARCHITECT

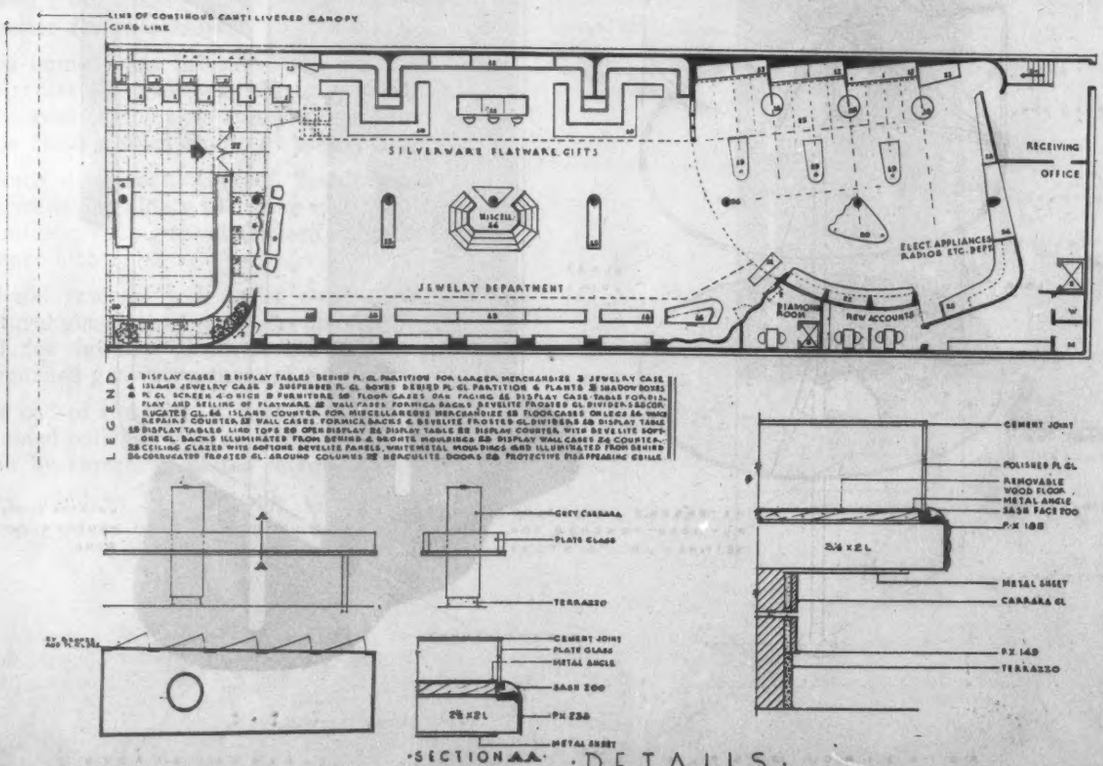
"Being a firm believer in the principle of the 'open-faced' store front, I designed this jewelry store with a maximum of glass, in order to reveal the interior to the passerby and prospective customer in a dramatic fashion. In my case, this is in no sense a theoretical approach, as I have made similar, extensive use of glass in other jewelry stores I have designed.

"In this particular scheme, a metal grille, hidden in the vestibule ceiling, can be lowered at night to close off this entire recessed entrance and display space. Other features of the design are the controlled sign space and a continuous cantilevered canopy that protects window shoppers from the weather and avoids the use of an awning.

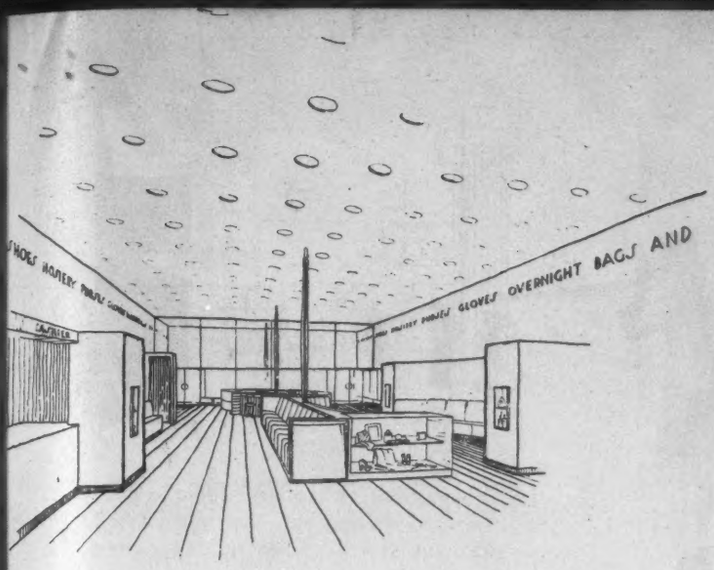
"The main sign is designed to be made of block glass letters set in front of a panel of removable glass panels with illumination behind. The ceiling of the electrical appliance department is also of glass, which is supported by white metal mouldings and lighted from above."





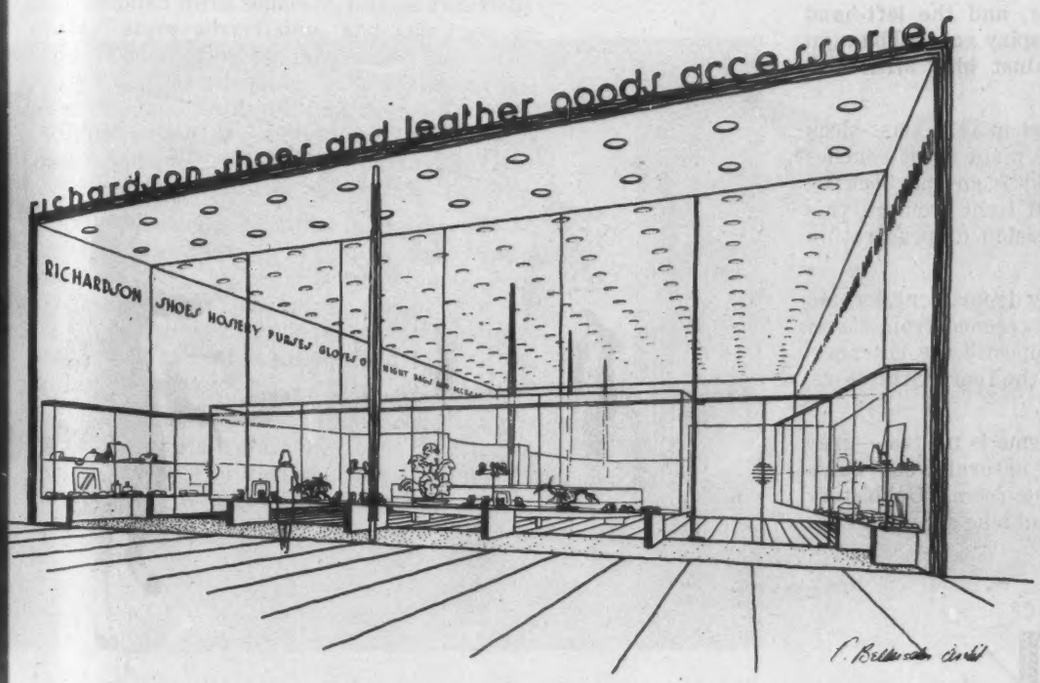


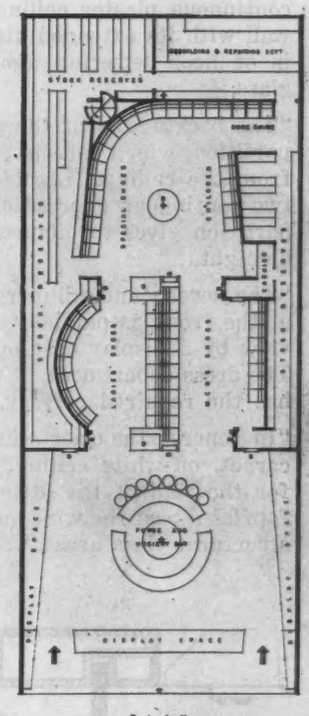
SECTION AA · DETAILS ·

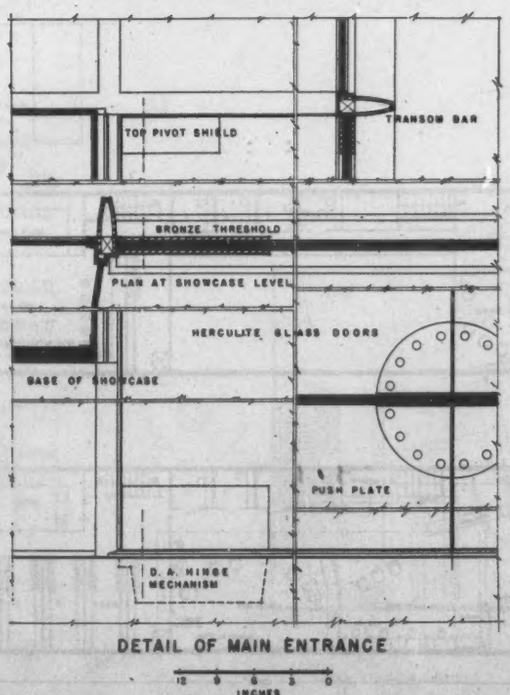


Shoes and Leather Goods

PIETRO BELLUSCHI, A.I.A., ARCHITECT







"The design for this store was conceived as an effort to exploit in a more definite and organic way the idea of the open front. In my opinion, this idea has in many cases fallen short of success because the attention of the onlooker was divided and confused between an interior which was not designed to be seen from the sidewalk, and an exterior that hated to lose its traditional identity.

"It seemed that a thoughtful use of glass and a carefully laid out interior would show the inherent possibilities of the open-front plan, and its probable impact as an advertising medium."

The architect has planned the various departments as integrated and related units. The vestibule display area, a fresh interpretation of a proven merchandising device, both lures the casual window shopper and guarantees that customers who enter the store to make a specific purchase are reminded of other items they might be persuaded to buy.

Samuel Glaser

Ladislav L. Rado

Womens Apparel Shop

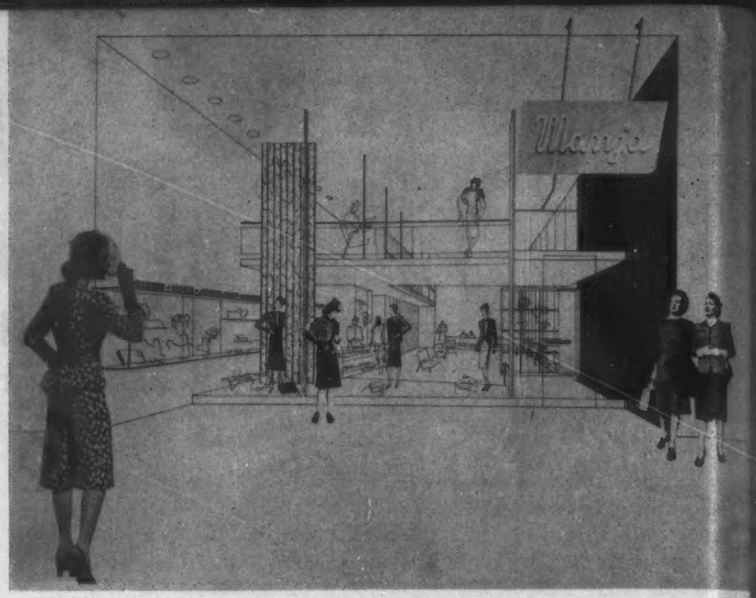
SAMUEL GLASER AND LADISLAV L. RADO, ARCHITECTS

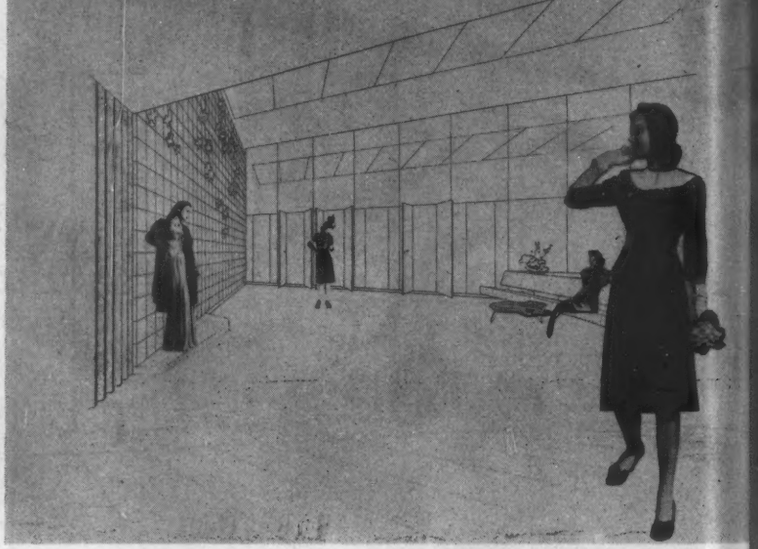
"The concept of continuity between the street and the interior is carried out by the entire front wall of glass with a minimum of exposed frames, the unbroken panel of wine-colored structural glass on the right-hand wall, the continuous plaster ceiling, and the left-hand wall with its extended display case. The sign is of neon lettering against blue structural glass.

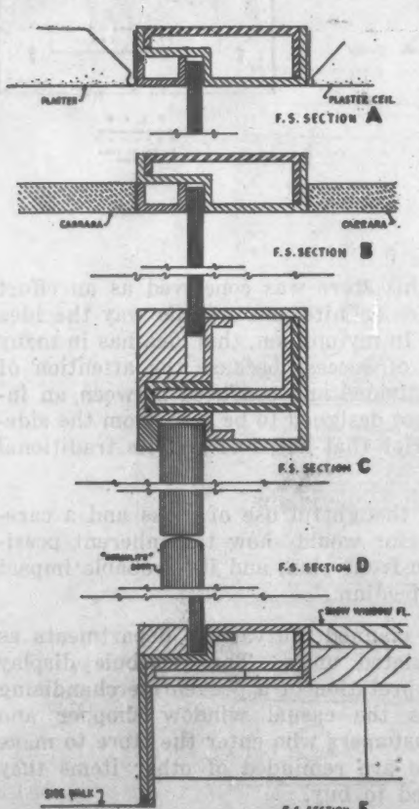
"The background of the shop is a glass-block partition, which ends in a plant box 10 inches from the ceiling. Lighted from the back by two continuous fluorescent light troughs, this partition gives the impression of penetrating daylight.

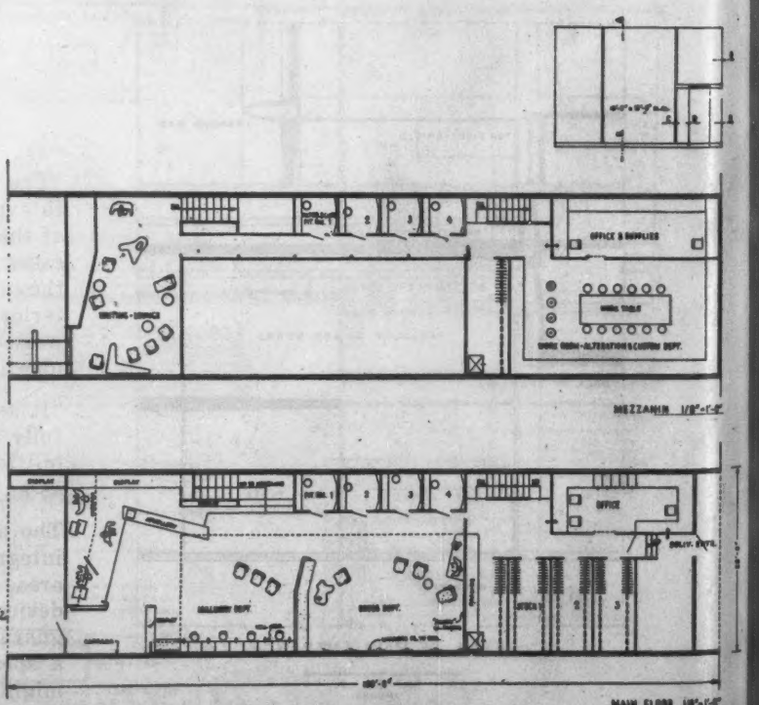
"The jewelry and millinery department, located at the front, is partially screened from street view by a display case opposite the entrance. The dress department, at the rear of the store, has the required privacy.

"In general, the color scheme is neutral—gray carpet, off-white ceiling, natural wood finish for the wall of the fitting room. Upholstery fabrics repeat the wine and blue accents of the structural glass areas."









Mens Apparel Shop

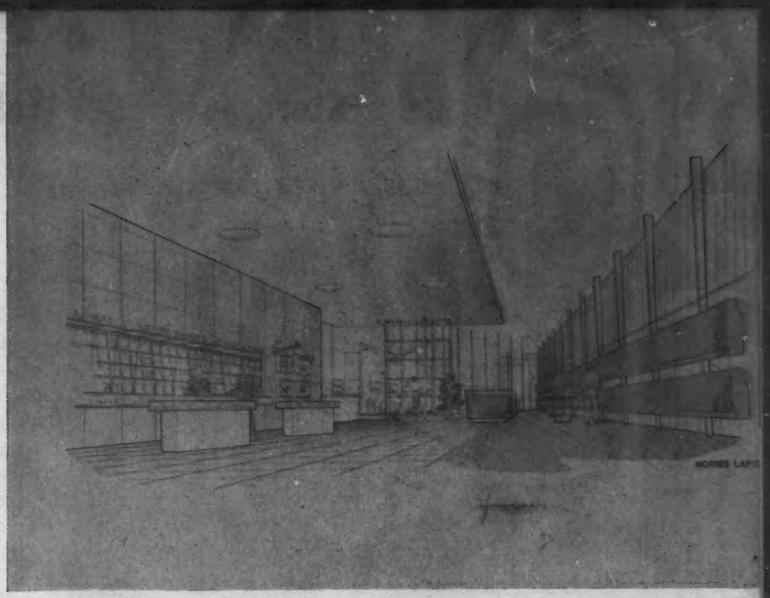
MORRIS LAPIDUS, A.I.A. ARCHITECT

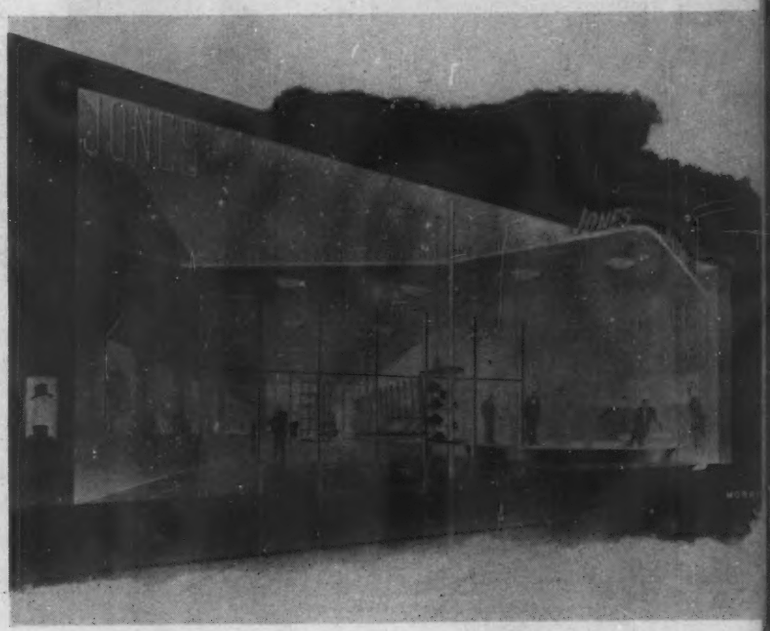
"One of the prime factors governing the design of this shop was integration between the chief component parts—exterior and interior.

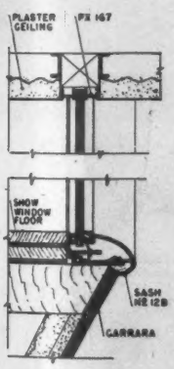
"The store front is developed as a mechanism to accomplish three separate, related functions: display, store advertising, and customer entrance. The interior, considered as a mechanism for selling, has adequate stock space and specially designed display units, organized against a dramatic background. Liberal use of plate glass accomplishes both the division between the exterior and interior and their integration.

"Despite the great openness in the store front, the effort was made to provide a maximum of display space, while still allowing an unhindered view of the interior. Slabs of structural glass further tie the interior and exterior and provide attractive notes of color.

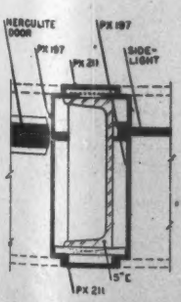
"On the interior, clear glass protects and houses the merchandise without concealing it. A continuous plate glass deck over the hanging clothes provides protection from settling dust and obviates the need for clumsy wall cases."



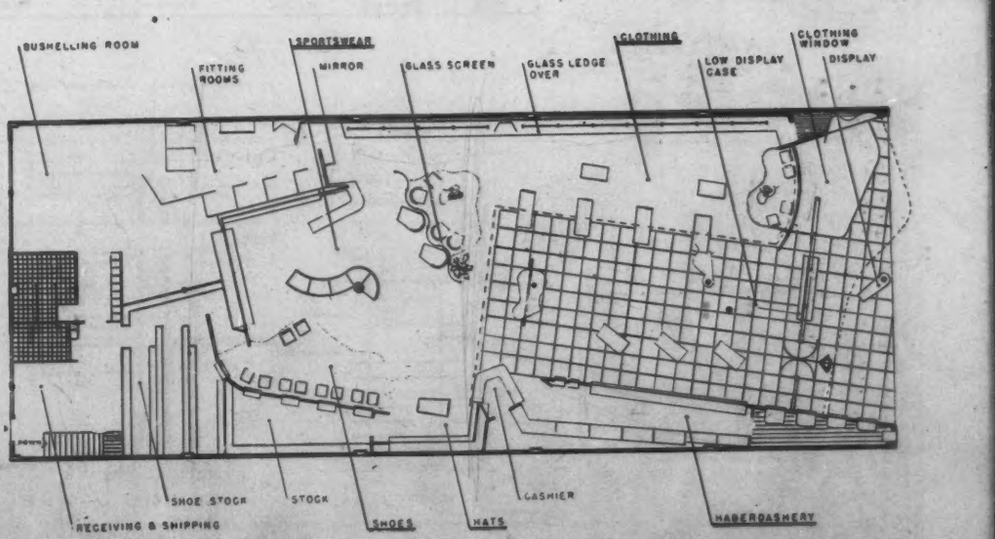




SHOW WINDOW



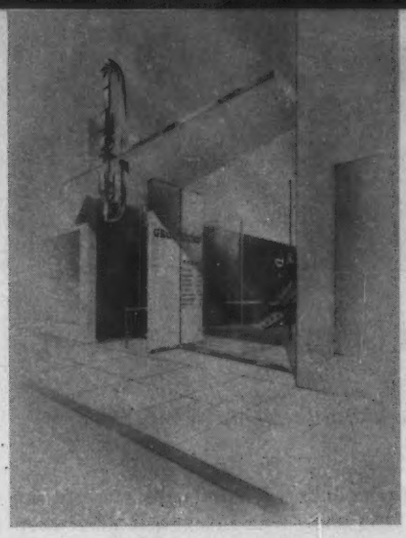
ENTRANCE DOOR JAMB
(TRANSOM BAR — SAME)



Louis Skidmore

Grocery Store—20 Feet Wide

SKIDMORE, OWINGS AND MERRILL, ARCHITECTS

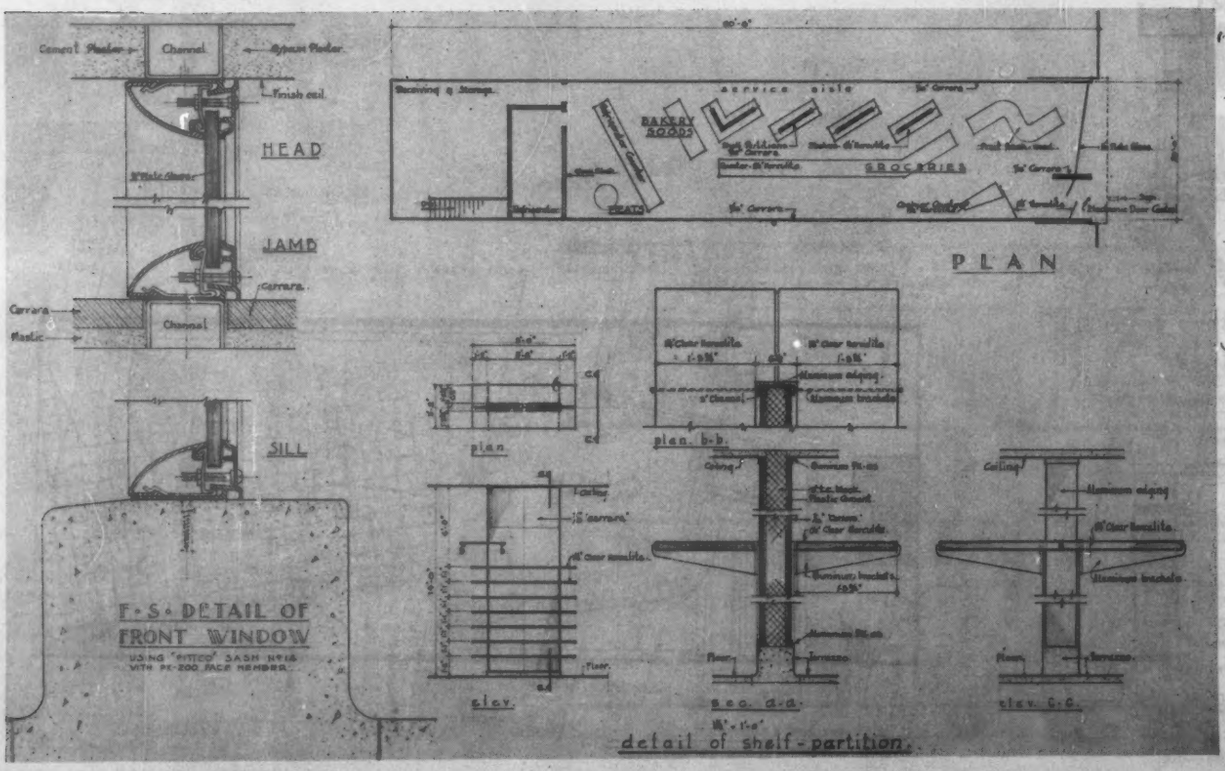


"The ordinary 'corner grocery' need not be the disordered complexity that accident and usage have made of it—a customer-confusing mess of everything from soup to nuts piled in the aisle and on the counter . . .

"The old type grocery store window with its 'display' and 'Specials for Today' plastered all over the glass, serves only as a barrier. In our plan, the whole store is the display. The fruit and vegetable department, in the usual location at the front, is designed for an attractive arrangement of fresh foods, easily serviced from all sides.

"We have avoided the usual shelves and bins around the perimeter. In a store of this size there is no excuse for cross circulation. For efficiency, the grocer stays on his side of the counter, the customer on hers. By means of diagonal partitions of structural glass, with tempered plate glass shelves on both sides and additional shelves behind (if necessary), we have provided a maximum density of goods, accessible with a minimum of walking.

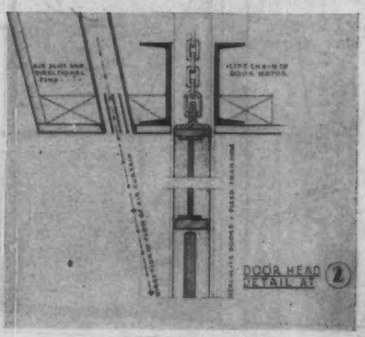
"The flow of groceries from the rear of the store to the shelves takes place in a special aisle on one side."

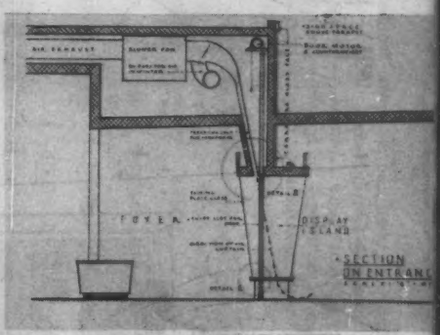


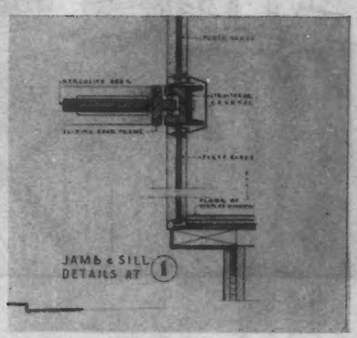
Super Market

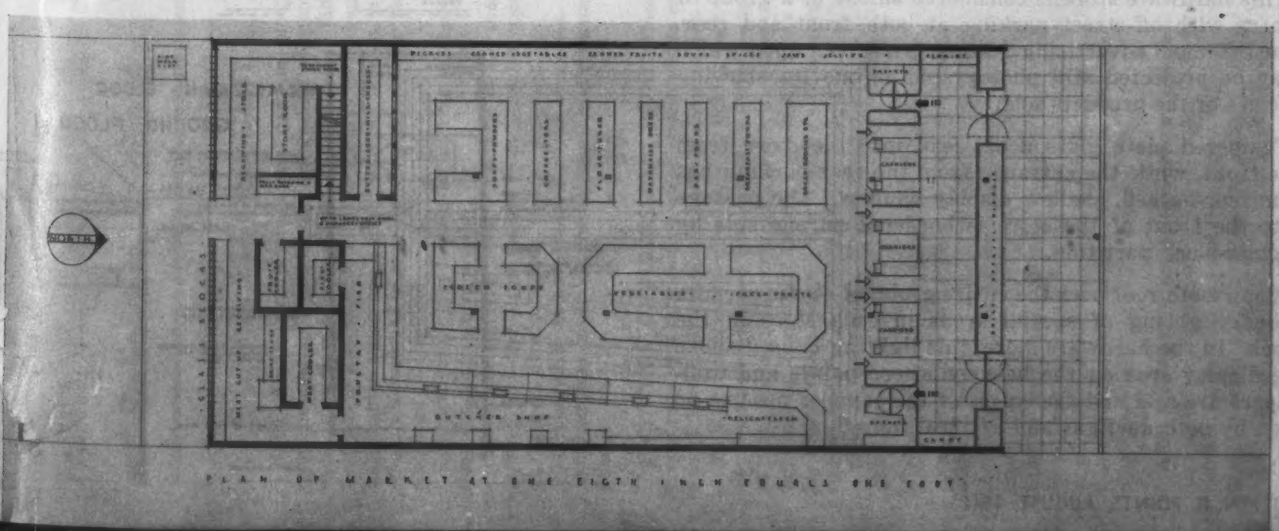
GARDNER A. DAILEY & ASSOCIATES, ARCHITECTS AND ENGINEERS

"In this open-front store, if the heat-treated plate glass entrance doors are not needed in summer, we have arranged to pull them up into head pockets by means of a press-button motor. In place of unsightly screen doors, an invisible curtain of air (exhaust air from the market's ventilating system) streams outward and downward through slots at the head of the door openings to exclude insects and dust. For cleanliness, all counters, case interiors, etc., are of opaque glass. The entire rear wall of the market is of glass block, between supporting columns."







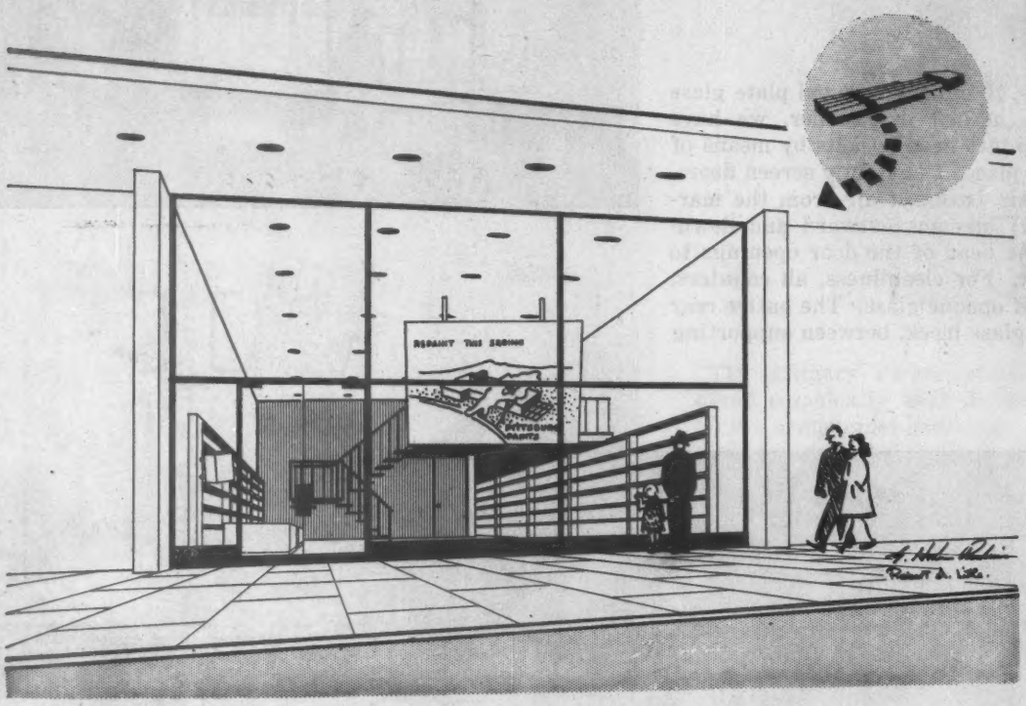


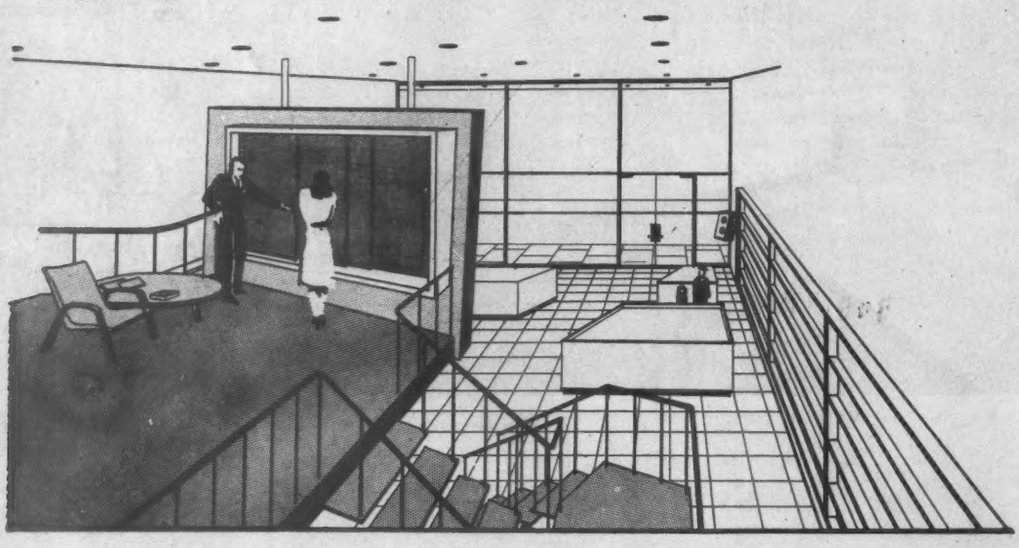
Hardware Store

G. HOLMES PERKINS, A.I.A., ROBERT A. LITTLE, ARCHITECTS

G. Holmes Perkins

Robert A. Little

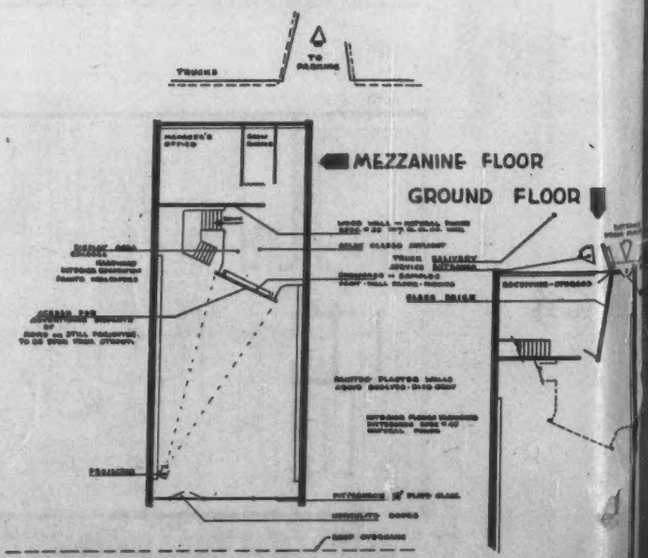




"This hardware store is considered as one of a group of stores with off-street parking at both front and rear. The principal advertising feature is a screen upon which may be projected still photographs or movies showing the use of the products sold.

"Tempered plate glass doors lead into the store from the front, while the entrance from the rear parking has a mirror-backed, shallow display window. The passage into the front of the store is bordered on one side by a glass-block partition.

"A sawtooth roof over the entire group of stores permits the skylighting of special areas in each store in the block. In the hardware store, this lighting is used above the display area on the balcony where paints and wallpapers are sold and the colors of the samples need to be seen by both daylight and artifical light."



These data represent accepted practice in manufacture but do not neces-

PAINTS, Phosphorescent, Fluorescent, and Radioactive, Continued

2. FLUORESCENT

USES– Fluorescent pigments are used in plastics, paints, dyes, printing inks and paper. Fluorescent pigments have no useful afterglow and their uses are confined to those applications where it is possible and desirable to have a special black light source which can supply invisible light to the pigments when luminescence is required. Thus, fluorescent pigments are electrically dependent.

Impregnated plastics have been used for luminescent electric lamp shades, costume jewelry, etc.

Fluorescent pigments have been used in the preparation of printing inks and paper for use in airplane instruments, maps, wall-paper, decalcomanias, theater programs, etc.

Fluorescent dyes have been used for draperies, upholstery, wall and floor coverings, theater seats, arm rests and aisle carpeting.

EXCITATION OF FLUORESCENT PAINT—Fluorescent materials require a light source which contains little or no visible energy if their fluorescent light is to show to best advantage.

An ultra-violet, or so-called "black" light is such a light, but any light bulb equipped with a suitable nickel oxide glass filter is a satisfactory, although not always an efficient, activating light source. Ultra-violet sources include the argon glow lamp, the high pressure mercury arc and the fluorescent lamp suitable filtered, and the new 360BL tubular lamp.

Some pigments respond immediately to activation, others require several seconds.

COLOR—The daylight colors are available in considerable range of pale to fairly vivid colors and do not correspond exactly to the fluorescent colors. Under activation the fluorescent pigments display an amazing brilliance and strength of color throughout a wide color range. Attempts to change the daylight color by the addition of non-fluorescent pigments adversely affects the luminescence through screening out the activating light or absorbing the emitted light. Synthetic dyes may be added by the manufacturer in small quantities to alter the daylight color with only slight loss in the fluorescence.

APPLICATION—Fluorescent paints are governed by the same general considerations as those which apply to phosphorescent paints. The particle sizes of fluorescent pigments correspond to those of ordinary paint pigments so that finished fluorescent paint can be applied readily by brushing or spray gun. To provide satisfactory fluorescence a zinc-cadmium paint should be applied so as to spread 120 yards to the gallon.

DURABILITY—Fluorescent paints vary considerably in their resistance to exposure to visible light and weather. Some are relatively unaffected by water, weak acids or alkalis or exposure to strong sunlight. Many have been exposed to outdoor weathering for months and even years with little loss of fluorescence. In certain vehicles the pigments are subjected to a photochemical darkening under some conditions of exposure to sunlight in the presence of water.

COST—Mixed paint for brushing or spraying is currently quoted by manufacturers at $40 to $60 a gallon. Future prices may be substantially lower.

3. RADIOACTIVE

GENERAL—Radioactive paints contain a minute amount of radium, mesothorium, thorium, or radiothorium, in a luminescent base such as zinc sulfide. Experience in applying the paint during the last 15 years has shown that when due precautions are taken to prevent the radioactive compound from entering the mouth or lungs of workers no detectable injuries have resulted.

USES—Up to this time radioactive pigments have been employed chiefly as a paint for the marking of instruments and dials. Radioactive pigment has sometimes been placed between two discs of transparent plastic in the form of buttons to be used as guide markers. However, full advantage has not been taken of this material in architecture and building. The marking of danger spots in buildings, fuse boxes and light switches and other controls which are normally in darkness, so that phosphorescent paints would not be activated, opens up an interesting functional field for radioactive pigments.

The range of visibility in hairline markings and small numerals is from 5 to 20 feet in darkness. Areas of 10 square inches are visible for about 200 feet. Areas of 25 square inches are visible up to 500 or 600 feet. The range of visibility depends upon the grade of compound, the area to which it is applied, and the dark-adaptation of the observer's eyes.

EXCITATION—Luminescence in radioactive pigments is caused by the bombardment of the particles of the phosphorescent responsive base and no external excitation is required.

COLOR—The daylight color is a slightly yellowish white and the luminescent color is bluish or greenish white. No other pigment or dyestuff may be added to change the daylight color.

APPLICATION—Special precautions and equipment are needed for the applying of radioactive paints. For satisfactory results, 1 gram (about 1/28th of an ounce) of pigment should be made to cover an area of not more than 4 square inches. A heavier application will give increased brightness.

The surface to be treated must be clean and free from grease or finger marks. An undercoat of zinc oxide or titanium dioxide white lacquer is recommended.

DURABILITY—Radioactive compounds can be formulated and applied so as to be stable under outdoor conditions. The amount of radioactive material present should be sufficient to yield optimum brightness but if used in excess of this amount, it will accelerate the more rapid breakdown of the sensitive base without yielding more light. The luminosity lasts from 6 to 8 years.

COST—Prices range from 50¢ to $3 a gram, depending upon the amount and character of radioactive material.

REFERENCES—A.I.A. File No. 25 for Paint Materials.

Luminescent and Fluorescent Paints, Bureau of Commerce Letter Circular 678.

Safe Handling of Radioactive Luminous Compound, Bureau of Standards Handbook 27, Government Printing Office, Washington, D. C., 10¢.

Luminous Paints and Colors, by E. R. Raaland, American Paint Journal, St. Louis, Mo., June 9, 1930, page 18.

Some Notes on Luminous Paints, Circular No. 272, by Gardner and Van Heuckeroth, Paint Manufacturers Association of the U. S., Washington, D. C.

Luminous Paints, by J. C. Bearn, Paint and Varnish Production Manager, New York City, Volume 5, Nos. 4, 5, and 6.

Luminescent Pigments and Paint, by H. Courtney Bryson, the Paint Industry Magazine, 1524 Chestnut Street, Philadelphia, February, March and April 1940.

Luminescent Paints, by J. Mitchell Fain, News Edition of Industrial and Engineering Chemistry, American Chemical Society, Washington, D. C., Volume 19, No. 22, page 1252.

SOURCES OF SUPPLY—The following is a partial list of manufacturers of luminescent paints and pigments. The omission of any product from this list emphatically is not to be construed as an indication that it in any way lacks merit.

Arrow Paint Products, 7604 Atlantic Blvd., Bell, Calif.
Ault & Wiborg, Div. of Interchemical Corp., 1754 Dana Ave., Cincinnati
Canadian Radium & Uranium Corp., 630 Fifth Avenue, New York 20
Continental Lithograph Corp., 952 E. 72nd St., Cleveland
Cruver Manufacturing Co., 2456 Jackson Blvd., Chicago
Di-Noc Manufacturing Co., 1700 London Road, Cleveland
Garland Co., 3800 East 91st St., Cleveland
General Luminescent Corp., 638 Federal St., Chicago
Hammer Laboratories, 624 Monaco Blvd., Denver 7, Colorado
A. C. Horn, 42-42 10th St., Long Island City
Keese Engineering Co., 7534 Santa Monica Blvd., Hollywood, Calif.
Lasting Products Co., 202 S. Franklintown Rd., Baltimore
Lowe Brothers, 424 E. 3rd St., Dayton, Ohio
E. P. Lynch, Inc., Providence, Rhode Island
New Jersey Zinc Co., 160 Front St., New York
Rhode Island Laboratories, 100 Pulaski St., West Warwick, R. I.
T. J. Ronan Co., Inc., 749 East 135th St., New York
Scientific Research Products, 1904 Patterson Ave., Chicago
U. S. Radium Corp., 535 Pearl St., New York
Valspar Corp., 11 East 36th St., New York City
Vita-War Corp., 1180 Raymond Blvd., Newark, N. J.
Wardway Paint Works, Chicago Heights, Ill.
A. Wilhelm Co., Reading, Pa.

PAINTS, Phosphorescent, Fluorescent, and Radioactive

BUILDING PRODUCT FACTS by Don Graf
PENCIL POINTS AUGUST 1944 • Serial No. 5

These data represent accepted practice in manufacture but do not necessarily mean that such products are currently available for civilian use.

DESCRIPTION—Any emission of light not ascribable directly to incandescence, and therefore occurring at low temperatures, is luminescence. (The word *luminous* includes all classes of objects which emit light, whether or not as the result of incandescence, and hence is not as accurate an adjective for cold-light emitting materials as *luminescent.)* Luminescent paints are coatings applied variously by dipping, spraying or brushing, which will emit light during or after excitation by a light source, called photoluminescent; or which will emit light without any form of external excitation, called autoluminescent. Commonly used luminescent paints fall into the following 3 classes:

1. Phosphorescent paints are non-toxic, photoluminescent and exhibit a glow for a considerable time after exposure to an external source of either "near" ultra-violet or visible light. All phosphorescent paints are also fluorescent. However, phosphorescent pigments do not fluoresce as brilliantly as fluorescent paints.
2. Fluorescent paints are non-toxic, photoluminescent and for all practical purposes emit light only during the period of excitation by an external source such as ultra-violet energy (popularly known as "black light") or some other light source.
3. Radioactive paints are autoluminescent and require no excitation from external sources. Radioactive paints are both phosphorescent for brief periods as well as fluorescent.

LUMINESCENT INTENSITY—To the uninitiated the intensity of light emitted from luminescent paints is frequently disappointing. Optical adaptation to darkness is subject to wide variation among persons as a result of differences in many complex contributing factors such as the observer's supply of vitamin A, the Purkinje effect, etc.

Immediately after blackout, at dusk, or on a moonlit night, the eyes may find difficulty in seeing the light emission of luminescent paints. After complete darkness-adaptation of the eyes a light intensity of 2/100th of a microlambert can be distinguished. (This is about equal to 1 twenty-five-millionth the brightness of an ordinary sperm candle.)

1. PHOSPHORESCENT

USES—The use of this material ordinarily should be confined to objects which are to be seen in complete or nearly complete darkness, and for such uses as would normally occur after dark-adaptation of the eyes had taken place.

Because the surface as well as the application of the paint can be controlled better in a factory than on the site, materials such as oilcloth, paper, cardboard, wallboard, adhesive tape, and decalcomanias which are factory coated with the phosphorescent paint, are available. Likewise, markers of transparent plastics impregnated with phosphorescent pigments are available.

Murals, decorative designs and ornaments, directional markers and safety warning signs, switch plates, kick plates, door knobs, furniture trim, light shades, are uses for phosphorescent paints which are already well known. Phosphorescent materials will act as an emergency light source in the case of power failure, to permit movement in a room, place of assembly or factory. Many new decorative, convenience and safety applications of phosphorescent materials are possible.

EXCITATION OF PHOSPHORESCENT PAINT—Daylight, visible artificial light and "near" ultra-violet light (3200-3900 AU) will activate phosphorescent paint. Mercury vapor and standard fluorescent lamps are probably most efficient excitation sources. The greater the intensity of light falling on the pigment, the greater will be its initial emission of afterglow.

The response to activation is not instantaneous. It may require from a few seconds to several minutes, depending upon the intensity of the exciting light source and the type of phosphorescent material being activated. In general, the longer the persistence of afterglow of pigment, the greater is the time required for complete activation.

COLOR—The daylight color of phosphorescent pigments is generally a light gray or light yellow. Attempts to change the daylight color by the addition of non-luminescent pigments will adversely affect the luminescence through screening out the activating light or absorbing the emitted light. Very small amounts of transparent synthetic dyes may be added to change the daylight color with only slight loss of phosphorescence.

APPLICATION—Surface for paint should be clean and dry. It is good practice to use two coats of an undercoater prepared with zinc sulfide (regular white pigment, not the luminescent pigment), lithopone, high strength lithopone, titanated lithopone or titanium dioxide. Lead or other metallic base paints should not be used. The same vehicle used in the luminescent coating should be employed in the undercoat. The white base coat provides a good light-reflecting background and protects the paint from the destructive effects, if any, of the surface to be painted.

After the undercoat is dry, the phosphorescent paint is applied with an absolutely clean, dry brush, stirring the paint with a wooden stick or glass rod just prior and during application. Being of a coarse, crystalline structure, phosphorescent pigments provide relatively poor brushing or spraying characteristics. Uniform covering, however, can be obtained by the application of two coats. For maximum phosphorescence these paints should be spread so that a total of one gallon of paint is applied to 50 or 60 yards of surface.

The calcium and strontium pigments are particularly susceptible to deterioration by moisture and if such paint films are to stand up under high humidities or exposure they must be protected by a coating of protective vehicle. In fact, a protective coating is a desirable precaution for *all* phosphorescent paints.

Pigment	Luminescent colors	Particle size	Intensity of luminescence	Useful afterglow	Durability	Activating light source
FLUORESCENT:						
Zinc sulfide	Yellowish-green, orange-red, orange-yellow, light blue	Normal pigment fineness	Brilliant	No useful afterglow	Exceptionally stable	Ultraviolet (black) light
Zinc and cadmium sulfides (combined)	Orange-yellow, yellow, red, orange, brilliant yellow	Normal pigment fineness	High	No useful afterglow	Good	Ultraviolet (black) light
PHOSPHORESCENT:						
Zinc sulfide	Green	Coarse crystalline to medium fineness	High	Short (30-120 min.)	Stable under normal exposure	Visible or black light
Zinc and cadmium sulfides (combined)	Orange-yellow	Relatively coarse	High	Short (15-30 min.)	Stable under normal exposure	Visible or black light
Calcium and strontium sulfides (combined)	Violet	Relatively coarse	Medium	Relatively long (10-12 hr.)	Sensitive to moisture*	Visible or black light
Strontium and calcium sulfides (combined)	Greenish blue	Relatively coarse	Medium	Relatively long (7-10 hr.)	Very sensitive to moisture*	Visible or black light

* *Should be protected against the elements by a coating of a transparent plastic.*

DURABILITY OF PHOSPHORESCENT PAINT—Phosphorescent pigments will eventually deteriorate, although none of the pigments fail because of continued re-excitation. Zinc and cadmium pigments are quite stable and some have been in continuous use for 2 and 3 years during the war. Calcium and strontium pigments properly protected from moisture can be expected to give service for 6 to 12 months or more under severe outdoor exposure and longer indoor service can be anticipated.

COST—Future retail prices of phosphorescent ready-mixed paint may be substantially lower than the current prices, which are about as follows, per gallon:

Prime undercoater	$15 to $20
Phosphorescent paint	$25 to $32
Protective coating	$10 to $15

LOCAL SERVICE — Fill in the blank spaces provided below with the names of manufacturers' local representatives who can help in problems involving this product.

Product _____
Local Agency _____
Representative _____
Address _____
Telephone _____

Product _____
Local Agency _____
Representative _____
Address _____
Telephone _____

Perspectives

The Modernist from Wainscott: Morris Ketchum, Jr.

Morris Ketchum has a notion that architecture speaks for itself—that good design constitutes the best advertisement the profession or the individual architect can have. When to this belief is added, as in his case, the ability to do very good design indeed, the combination is hard to beat. At any rate, we find him today, at forty, with a substantial record of accomplishments behind him and a healthy list of active clients who have confidently entrusted him with a variety of work, mostly mercantile, ranging from small individual stores to an entire business district for a city of 35,000 inhabitants. How did he get that way?

Well, to begin with, he was one of the boys who came out of architectural school (Columbia) during those strange transitional years of the late 'twenties when most architects in practice were so busy building they had hardly time to notice, more than superficially, the young fellows' growing discontent with the eclectic ways of their fathers. It was the heyday of the skyscraper—and fearful and wonderful were the forms that arose on every hand in the cities. It was the era of the lush hotel, the magnificent bank, the super-colossal movie palace, bedizened and bedecked with details either cribbed from the copy books or invented by a feverish imagination. But in the schools rebellion was stirring. From Europe, returning travellers brought word of changes in architectural thinking, their evidences extending from the austerities of the Bauhaus to the modernisticisms of the Paris Exposition of 1925. The students were attracted by the promise of something new and fresh to supplant the combination of dull pretentiousness and vulgar opulence they observed in much current American work. They went "Modern" in a big way, some critically and some uncritically, but all enthusiastically. They were the neo-pioneers of today's architectural rationalism.

Young Ketchum went in 1928 from Columbia to Fontainebleau and then to other parts of the Continent, notably Germany and Holland, where he became convinced by what he saw that the better contemporary designers were headed in a healthy and progressive direction—the direction in which he wanted to go. He spent eight months in Europe and returned home just in time to encounter the impact of the stock market crash. Jobs were still to be had, however, and he worked in several New York offices, winding up in that of Mayers, Murray, and Phillip (successors to the great Goodhue) where he helped to design schools and other buildings for our Indian reservations. Finally, when work ran out, he was forced like many others of his generation to cope with the depression by seeking to build an independent though precarious practice, gleaning whatever commissions were to be had, either by himself or in association with young architects in the same plight.

He did a few houses for friends or relatives of conservative disposition who strictly ruled against anything "modern" and insisted on following "good old precedent." He had no choice but to give them what they wanted, but characteristically treated their chosen "styles" with quiet freedom, inserting here and there a large window area and providing some harmonious but un-archeological means for linking indoors and out. Strangely, or perhaps not so strangely, they found that these departures from orthodoxy made their houses not only distinctive but more enjoyable and pointed to them proudly as evidence of the soundness of their preference for tradition!

These experiences only served to confirm the young man's determination to break away from the bondage of stylism and to return to fundamentals. He soon found opportunity to practice rational design when he discovered that the field of merchandising has no arbitrary preconceptions to hamper the architects of its stores—that the sole criterion for success in store design is to get results as directly and economically as possible.

At about this time Morris was thrown together a good deal with Ed Stone, destined to become famous as designer of some of the finest contemporary American houses and co-designer of the Museum of Modern Art. He shared offices with Ed and they found they also shared essentially the same views about architecture. Though the two were not actually associated until they worked together, along with others, on the Focal Food Building for the 1939 New York World's Fair, they helped each other and their many friendly discussions undoubtedly sharpened up each other's conceptions of good contemporary design.

It was through Ed Stone's recommendation that Morris got his first real chance to do a store. The job was the Moss Linen Store on Fifth Avenue, and he was associated as co-designer with the well known Paul T. Frankl. So clean and orderly and attractive was the result that almost immediately he was asked to do two others—the Lederer de Paris leather goods shop (with Victor Gruenbaum associated) and the Ciro of Bond Street jewelry shop, both also on Fifth Avenue. These were excitingly original in arrangement, with daring innovations (for Fifth Avenue) in the treatment of their recessed arcaded fronts—done with the sure taste that has marked all Ketchum's work and won it the generous admiration of his fellow architects, young and old, as well as that of both merchandisers and their customers.

From that time on there was a succession of shops for him to design, some in association with others, some independently: a clothing store for Wallach's in Brooklyn; a haberdashery (with Gruenbaum) for Steckler on Broadway; a children's shop at Forest Hills, Long Island; a small gift shop for Trade Winds Inc.; a hand-

Sales floor of Ketchum's Artek-Pascoe Shop, New York City, which has become a classic example of good store design in the relatively few years since it was finished.

Stoller

craft shop for America House (with Dorothy Draper); the justly admired Artek-Pascoe furniture showroom on Forty-Eighth Street, and a number of others. Interspersed with these were wholesale showrooms and executive offices in which the requirements were for smart, business-like, and thoroughly rational interiors in which both good planning and attractive appearance were unobtrusively but effectively present.

Morris likes store design because it deals with realities. Properly done, there is no fakery about it. Everything is designed to serve a definite purpose and the purposes include arousing in the customer a feeling of admiration and satisfaction through appeal to his senses as well as through making it easy and comfortable to shop. To do this sort of work well calls for both careful analytical planning, based on thorough understanding of the problems of the merchant, and superior taste and skill in creative design. It is a mistake, he feels, to think of the "store front" as a separate thing, to be tacked on to whatever kind of establishment may be in back of it. The store is a three-dimensional affair, he holds, in which all functions—sales, display, storage, receiving and shipping, customer parking, etc.—must be woven into a smoothly working and orderly whole. His theories have been proven valid time after time by that most convincing of all arguments to the merchant—increased sales traceable to improved design.

Though there has been a general dearth of work during the war, Morris has been far from idle. Since he could not hope to play an active part in the war, due to a hearing defect, he has participated during this period in the design of three servicemen's centers in association with Harrison, Fouilhoux & Abramovitz, Architects and Engineers. It is his strong contention, voiced in a committee report recently published in the Journal of the A.I.A., that the architect must broaden his fields of practice to include a number of activities for which he is admirably fitted, including product development, research, and technical advice for various commercial organizations. He has practiced what he preaches and is now retained as consultant by the Davison Paxon Company of Atlanta, the Kawneer Company of Niles, Michigan, the Coca Cola Company of Atlanta, and the Chamber of Commerce of Elkhart, Indiana. For this last organization he has been engaged to study the postwar renovation of the entire shopping district—a practical problem in city planning, the successful solution of which will greatly enhance the city's position as a regional shopping center in competition with neighboring communities.

His judgment of the outlook for postwar work is favorable, as evidenced by the fact that he has just moved into handsome new offices on Fifty-Seventh Street—next door, by the way, to Robsjohn-Gibbings. Here, with his young partners Frank Gina (in the Marines) and Stanley Sharp, he is ready to tackle any problem lying within their combined talents—and they cover a large scope.

Like many active and energetic architects, he finds time for teaching, which he feels is a responsibility that should be taken very seriously by the profession. For two years, 1942-43, he was senior critic in Advanced Design at the School of Architecture of New York University. This school, though it had made a fine record during its lifetime, was unfortunately discontinued by its trustees and Morris moved over to Cooper Union where he gave a short course in Materials and Color in Architecture. Since November 1944, with the rank of Assistant Professor, he has headed the Design staff at Yale, devoting two days a week to this work. His students, interestingly enough, are mostly in uniform, assigned by the Army and Navy to the Engineering School and privileged to elect Architecture as a part of their engineering studies. Morris maintains that he gets as much in the way of constant stimulation from the students as they get from him, which checks with the experience of most conscientious teachers.

In person, Morris is tall, dark, and handsome. With his erect six-foot stature, black hair, dark eyes, and well-tanned skin he might be taken for an exceptionally fine-looking Indian, except that his forebears were Americans of English extraction. He is mild-mannered and serious, but he can flare up briefly on provocative occasions—and does. His work is his chief interest and when he is engaged on a problem, whether of business or design, he becomes thoroughly preoccupied with it. At such times, though not completely oblivious to other things going on around him, he is not easily distracted from the matter in hand. On one occasion, bent on consulting an associate in another part of the office, he squeezed past one of his men bent over a drafting board, and in doing so brushed the lighted end of a cigarette against the man's coat. He subconsciously noticed what he had done but kept right on going. Only upon his return a few minutes later did he express concern lest he had set the coat on fire. The principal thing on his mind having been accomplished he was then ready to deal with the momentary emergency.

Recently, though he still lives in the city, he bought an old farmhouse down on Long Island at a place bearing the oddly architectural name of Wainscott. (The neighborhood was once a source for oak paneling.) What he proposes to do with it after the war is a question that has aroused speculation among his cronies. Our guess is that he will make it into an attractive and comfortable home, keeping its fundamentally sound general form but opening it up with adequate windows where they will count for most enjoyment, and perhaps knocking out a partition or two to make its rooms more spacious. Whatever he does with it, you may be sure it will bear the stamp of his unerring sense of fitness. He is that kind of a guy.

KENNETH REID

Store for American Crafts, New York City

MORRIS KETCHUM, JR., A.I.A., AND FRANCIS X. GINÁ, ARCHITECTS

DOROTHY DRAPER, DECORATOR

Entrance door—bright red

July 6, an exhibit of "Hand Arts of America" opened at America House, the combined shop and gallery shown here. The display, made up of examples of recently produced handcrafts (enamels, wood sculpture, ceramics, glass, etc.) from all over the United States, runs until September 1.

Exhibits, however, are secondary to the store's main purpose—to serve as the retail headquarters for the American Craftsmens Cooperative Council, an organization of all of the handcraft guilds in the United States. Until the organization decided to move to these larger quarters on a prominent corner of Madison Avenue, it occupied a small shop on a sidestreet.

In developing the scheme, the architects considered the entire shop as a display case. The sales floor and store fixtures are all visible from the sidewalk. Displays shown directly at the windows are kept low so that it is easy for the eye—and the customer—to travel inward. Reversing customary procedure, the entrance door unit is treated as practically a solid panel, with only a small central opening in the shape of the organization's trademark—a stylized eagle. The panel is painted bright red.

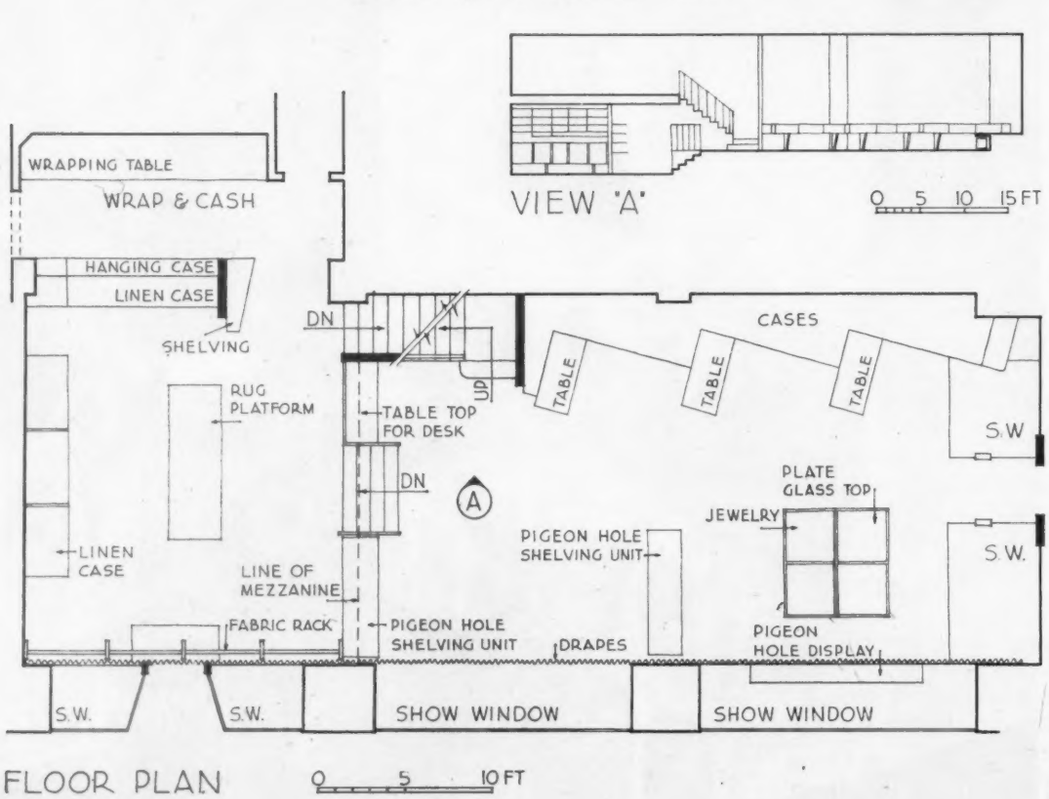
Due to war conditions and a limited budget, only a few new fixtures were built; most of them were removed intact from the old store and reinstalled.

Color schemes throughout are red, white, and blue,

Main sales room looking toward entrance

Photos by P. A. Dearborn

Sidewalk view of main sales room



with casework either natural maple or painted. The lighting is a combination of incandescent spotlight and fluorescent trough lighting.

Organization of the store is simple in the extreme—a large sales room on the entrance level, a rear sales room and offices at a lower level, with a balcony above this rear portion which is used both as exhibit space and as a lounge for the Council's membership. A large basement provides reserve stock space and facilities for receiving and shipping.

The angular design of wall and showcase counters serves the dual function of breaking up the uncompromising rectangularity of the space and of luring the "just looking" customer back into the store in several inviting steps.

In our judgment, the flamboyant sign used as a balcony screen is the only jarring note in an otherwise nicely conceived design. Out of scale and character with the rest, it seems a distinctly noisy bull in a dignified china shop.

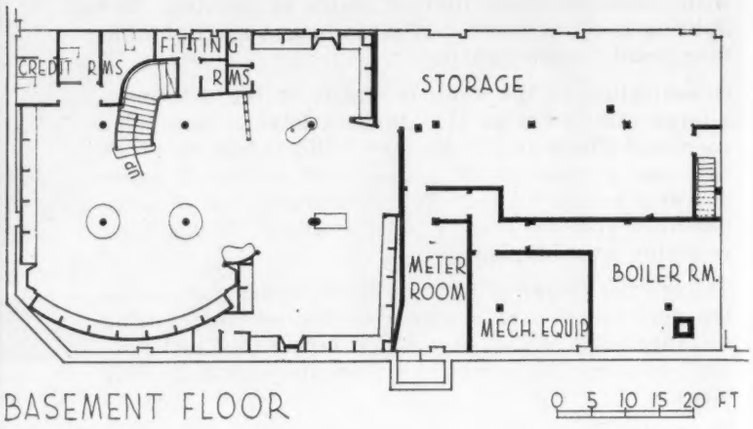
The balcony exhibit room and members lounge

The rear sales room is down a few steps

America House

Looking from the rear sales room up to the main floor

Exterior view



Mens Clothing Store

Rego Park, Long Island, N. Y.

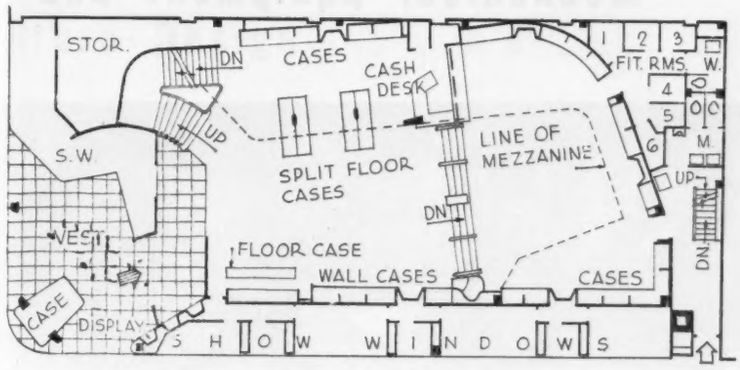
MORRIS LAPIDUS, A.I.A., ARCHITECT

Floor surfacing is deep brown asphalt tile with a white feature stripe; blue carpeting is used on stairs and in the womens department

Photos by P. A. Dearborn

View from mezzanine; the railing is wood framed with plate glass panels

"In planning this store," the architect tells us, "I used merchandise as the central motif." In space arrangement, visual integration of front and interior, and orientation of merchandise displays for view from the street, the scheme is similar to Mr. Lapidus' store design shown on Page 59. The basic consideration was to provide effective display of as much merchandise as possible within a given space. In this store, all merchandise is on floor display, rather than screened or concealed in cases; the clothing and its containers are themselves the chief design element. Otherwise, the scheme is controlled by changes in ceiling heights (separating mens and womens departments) and use of various types of lighting, which is employed as both a selling and decorative medium.



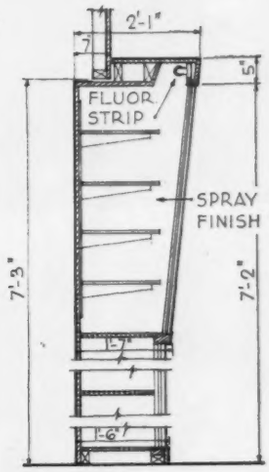
FIRST FLOOR

0 5 10 15 20 FT

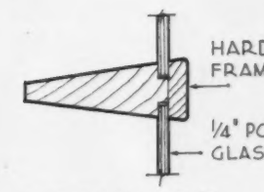
Lighting

For general overall, high-intensity illumination of the floor area, incandescent lighting is employed—mostly in the form of flood or spot lights. Fluorescent lamps light the shorter merchandise cases; in all ceiling troughs and behind cornices over the wider displays, cold cathode lighting is used. In the latter instance, the arrangement illuminates the walls and ceiling above, as well as the merchandise below. Cold cathode, used exposed over the doorway to the basement, serves as a circulation indicator.

Shirt display case of light oak; details of case and the adjacent transparent screen are shown at right



DETAIL OF SHIRT CASE 0 1 2 FT.



DETAIL OF TRANSPARENT SCREEN 0 1 2 IN.

Entrance detail

Wood and glass screen between entrance and sales area

Stair well

Paul Woolf

Two examples of the work of John Matthews Hatton, whose store architecture is well known: Above, interior of store for S. S. Pierce Co. in Boston; at right, proposal for a large jewelry store interior. In both, store ceilings are dark in order to make lighting of the sales area and the zone of interest where merchandise is displayed more impressive. Note also the combination of direct and indirect lighting and the way in which air conditioning grills are subordinated. In the jewelry store, rows of incandescent downlights cause the merchandise to sparkle.

Store Design . . . . . BY JOHN MATTHEWS HATTON

The best in contemporary architecture is essential for the progressive merchant's store; and in store design in particular, understanding of the job that each type of mechanical equipment can be expected to do, and of methods of using equipment to the merchant's fullest advantage, is a great part of the basis for good contemporary design.

And in order to decide whether or not a certain type of equipment shall be used, it is necessary to weigh the advantages to be obtained from it against its cost, including initial charges, maintenance costs, and the time and money involved in making future alterations. This last is important because not only are store displays continually being shifted as stocks change, but also complete renovations of departments, even of entire shops, are in many cases periodic necessities. It is usually difficult to foresee the exact nature of such future changes; but the progressive merchant cannot afford to tolerate obsolescence, and he knows he will eventually have some remodeling to do. Nevertheless, such installations as sprinkler systems, escalators, elevators, etc., are inflexible once they are in place, and determination of their location has to be thoroughly studied so that, as far as possible, they will continue to offer maximum convenience no matter how the store is changed.

Heating and Air Conditioning

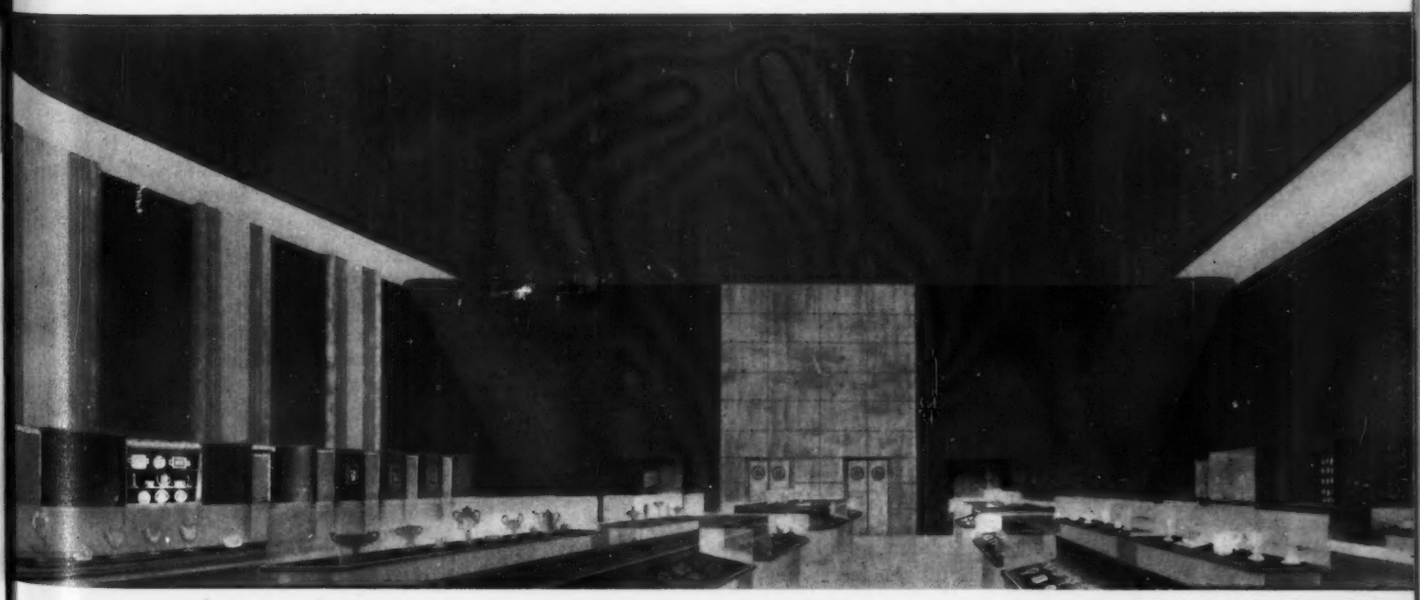
Not very often is a store building designed anew, from the ground up. Usually a new store is an alteration to an existing building, and new equipment has to be introduced into the old shell. And of all the types of equipment possible, the heating and air conditioning systems present perhaps the most difficult problem as far as their physical disposition is concerned. Heating radiators, unit heaters, ducts for distributing treated air—all are bulky items which, by their mere size or shape, can easily distract attention; and attention in the store has to be concentrated on the merchandise. That is what the merchant sells, the buyer buys; and anything which interferes with the sales process is uneconomical.

These comfort-producing systems, however, have an important part in successful merchandising, for a comfortable store automatically produces a more receptive customer. In regard to heating and air conditioning, the architect has two principal jobs: first, to determine (in consultation with the merchant) what the system should do—how many degrees of heating or cooling are desirable, what particular conditions the kind and location of merchandise displays impose, etc. Secondly, the architect has to incorporate the system into his design so that it can function unobtrusively as part of the whole. In between these two jobs, or concurrently, the advice of a competent specialist is indispensable. The specialist has to produce an engineering design which indicates what kinds and quantities of equipment, in what locations, best provide the results the architect has determined upon; and if what is best purely from the engineer's point of view is not best architecturally (that is, if it interferes with the prime purpose of the store: sales) then the design of the store as a whole or the system design must be altered, or they are mutually adjusted.

Merely to suspend a duct and provide outlets and an intake is not to *design* an air conditioning system. The good store architect does more; he may conceal them, or he may expose them and use them as design elements intended to focus attention on the merchandise; in any event, he consciously makes them an integral part of the scheme for merchandising.

Acoustic Treatment

It is axiomatic that people, like sheep, flock to buy where others have bought satisfactorily. The merchant whose store is crowded has many potential customers on



Nyholm

Above, interior of fourth floor department store for James McCreery & Co., New York, Williams and Harrell, Architects. In this extremely simple interior, the merchandise forms the only contrast. Lighting fixtures and air conditioning outlets, as well as sprinkler heads, are arranged on the ceiling in a simple geometrical pattern.

his hands; but their very number may bring confusion, and a confused customer is hardly a satisfied one. Crowds are noisy, and because noise is one of the greatest sources of confusion the question of noise control becomes important.

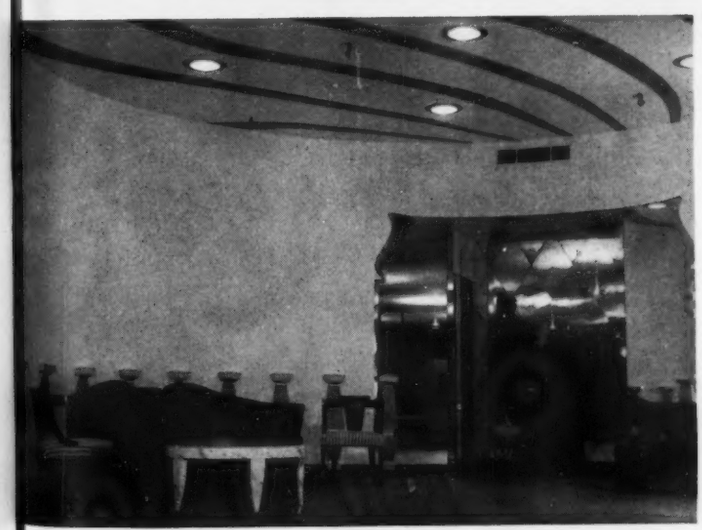
Experiments indicate, as does experience, that the most practical way of correcting unduly noisy conditions is by means of surface treatments applied to ceilings, walls, and floors. Use of acoustic treatments on ceilings is well known. However, few realize how important a part walls and floors play. All these types of surfaces would reflect sound (instead of absorbing it as acoustic treatment does) if they were plane surfaces, hard and shiny.

In the average store the walls are lined with shelves, cases, racks, etc., for merchandise. Each of these helps to break up the plane surface, to form small, sound-absorbing pockets, and the merchandise itself absorbs much sound. If walls or showcases are arranged in groups to form separate departments within the larger store, so much the better; chances for reverberation of sound are correspondingly reduced. Above the usual wall cases, however, is often a smooth, bare wall. It may be worthwhile to investigate the cost of, and the results obtainable from, treating this wall area acoustically.

Seldom do stores have bare, hard floors nowadays; they are too hard on the customers' and clerks' feet. Whatever the type of flooring, it has an acoustical function. A store in which a deep-piled carpet is economically feasible is very quiet, not only because the carpet absorbs impact noises, footfalls, etc.; it also absorbs much sound and so prevents reverberation. So it is with other materials, including such materials as magnesite or linoleum, depending on their density and porosity.

Lighting

Not many merchants—and probably, not too many architects—realize the true importance of lighting, its vital



Top, another portion of the fourth floor of McCreery's store shows a solution to the problem posed by installation of the sprinkler. Provision of a hung ceiling was not economically feasible, hence the partial ceiling over the display cases in an attempt to limit the customer's eye to the zone where the merchandise is displayed.

In center, this corner of the swank evening dress shop in Garfinckel's department store, Washington, D. C., also designed by Williams and Harrell, is in a way an exception to prove a rule. Here, by careful choice of color, the architect has been able to decorate the ceiling without detracting too much from the merchandise. This is a solution seldom attempted successfully.

part in store design. Indeed, from one point of view proper lighting is the only sound basis for store design.

The reason is simple: the store has one prime function, to sell merchandise. The "architecture" of the store has to recede into the background; it cannot obtrude itself on the objects for sale. Conversely, the *merchandise must be emphasized,* and one way to do this is to illuminate it so brightly that it becomes the most prominent thing in the store enclosure.

There is an analogy here between the theater and the store, though not an exact parallel. In the theater, all light is concentrated upon one spot, the stage. In the store, light can be concentrated upon one type of thing, the merchandise, but it is in many different locations and is composed of many different items; and the display is continuous all day and, often, part of the night. Some general lighting is needed in the store; and whereas, in the theater all is blackness except the stage, where a pinpoint light by contrast becomes brilliant, usually in the store some part of the area is in competition with daylight.

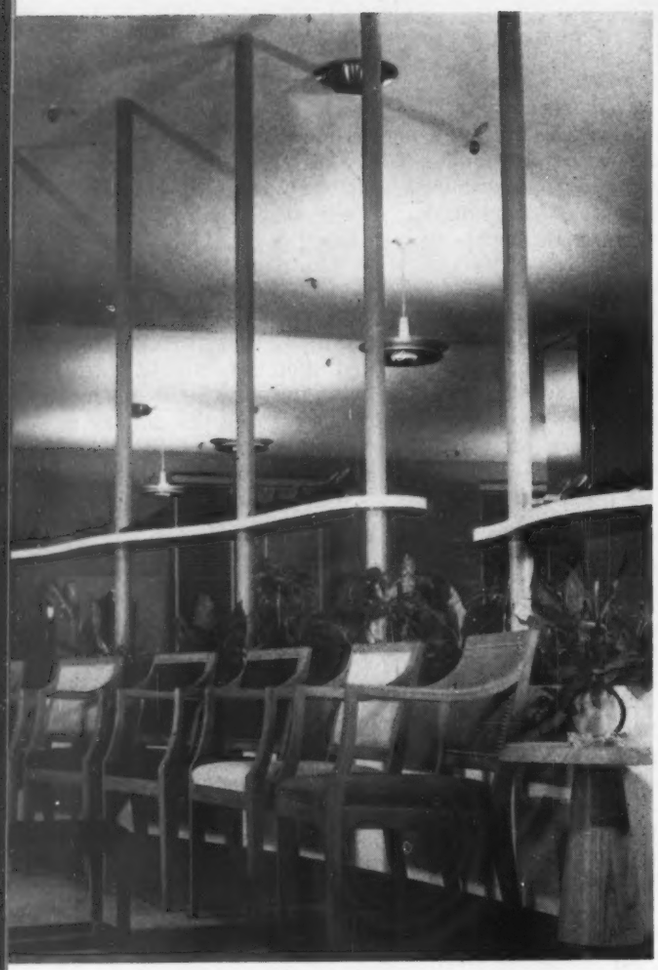
Again, store lighting has an entirely different function than the illumination in a house, restaurant, railway station, or other place where people are the principal objects of interest. In these interiors, general diffused illumination to light the space is desirable. But in a store (to repeat a thesis previously stated) where merchandise is displayed for sale, and quick sale at that, the attention of the customer should be riveted on the articles on sale, and they should be made to appear as glamorous as possible. Proper lighting, and plenty of it, constitute one of the ways of accomplishing this result.

The average person seldom focusses attention on objects located above eye level, though he may be distracted by them. It follows that, in a store, the zone of interest should not extend much above eye level except for infrequent accents, which might rarely be used to emphasize the zone of interest if this can be done without distracting attention. If interest is to be held at eye level, the store ceiling should be almost completely obscure, as opposed to a currently common practice of flooding the ceiling with indirect lighting. Indirect light on the ceiling not only distracts the eye from the merchandise, it has no "punch" for emphasizing displays.

Within the eye-level zone of interest, the merchandise on display constitutes the picture on which the customer's attention should focus. Display lighting is very similar to stage lighting, or to the composition of a painting, in that spot lights can be used to "build up" points of interest. In general, direct incandescent downlighting, using lenses to direct the light, and plenty of wattage, should be the main light source for the merchandise area. Concealed fluorescent lamps can be used over goods in shelves to highlight that portion of the wall which is important and restrict eye-interest to the desired zone. To create a frame for the display-picture, an additional row of fluorescent tubing can be installed so that it will faintly bathe the wall above the merchandise. Such lighting may come from a cove overhead or from a lower trough just above the shelves.

In regard to lighting as well as acoustic treatment, the floor is important. It is preferably very light in color, to provide what might be called indirect lighting in reverse. By reflecting light upward it can help to concentrate interest on the zone where merchandise is displayed.

Each store presents a different lighting problem requiring different solutions, different equipment. However, in addition to the general principles just enunci-



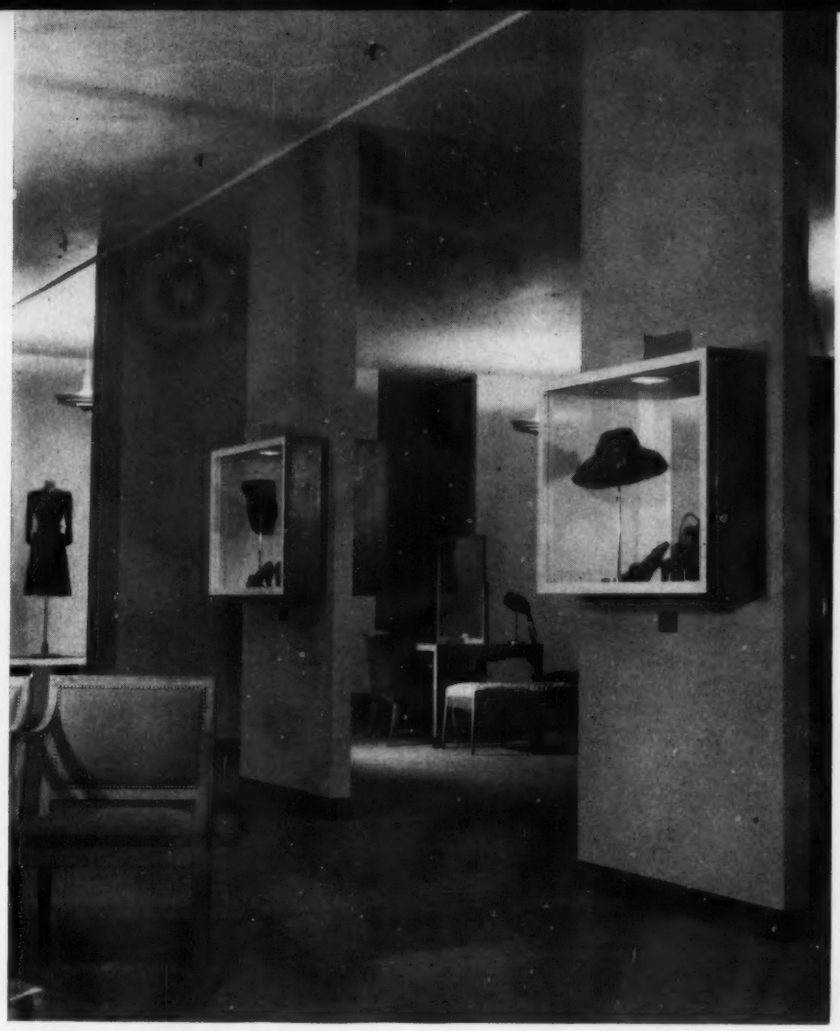
Shoe shop in Garfinckel's department store illustrates what happens when the ceiling is too brilliantly lit. It is hard to find the merchandise even though very strong lensed ceiling fixtures are used in addition to indirect lighting units with too high a wattage.

ated, there are a few specific problems to be commented upon.

For one thing, no artificial light can compete successfully with daylight, even on a cloudy day or in shadow (even here, natural light reflected by surrounding objects is of extremely high intensity.) Consequently, it is important to concentrate a lot of light near store entrances, so that the entering customer will not find the store interior, by contrast with daylight, dim. If uncurtained or lightly obscured windows are part of the design, artificial lighting has likewise to be concentrated near them.

Special types of merchandise require special lighting. Jewelry displays, for instance, demand extremely brilliant, concentrated light in order to bring out the sparkle of the merchandise. Furs are perhaps the most difficult objects to display because the nature of a pelt causes it to absorb light, yet each hair should have a sheen. This combination of depth and glossiness, apparent in sunlight, is usually lost under any except the most carefully designed artificial lighting.

Interior, Baroque Restaurant, Williams and Harrell, Architects. In such an interior, it is not necessary to concentrate attention upon a single zone of interest. Lighting fixtures are decorative and the ceiling is patterned.



This store interior, also by Williams and Harrell, is a hat shop in Garfinckel's department store and shows the use of special lighting within display cases at eye level. There is absolutely no decoration to distract attention from the merchandise.

Typical of problems encountered in modernizing, particularly in department stores, is this fur department in McCreery's. The changes in ceiling level interfere with the design and yet they are in many cases not noticed by the customer because he is primarily interested in what is on sale. However, the indirect lighting fixtures at the right help to emphasize a break which might better have been obscured. Notice also the special type of lighting for fur displays.

Nyholm

Toward an Old Architecture

by Robert Woods Kennedy

The author, a native New Englander who has practiced architecture there, has this to say about Colonial "style": "In any discussion of tradition, there is always the one who will claim it the priceless ingredient of an architecture. And there is always the other who will condemn it as the ball and chain on the architect's creative instinct. These two points of view remind me of the two types of drinking men: those who won't stop it, and those who won't touch it. So it is with some temerity, as a good New Englander and therefore in the thick of this battle, that I call down a plague on both their houses."

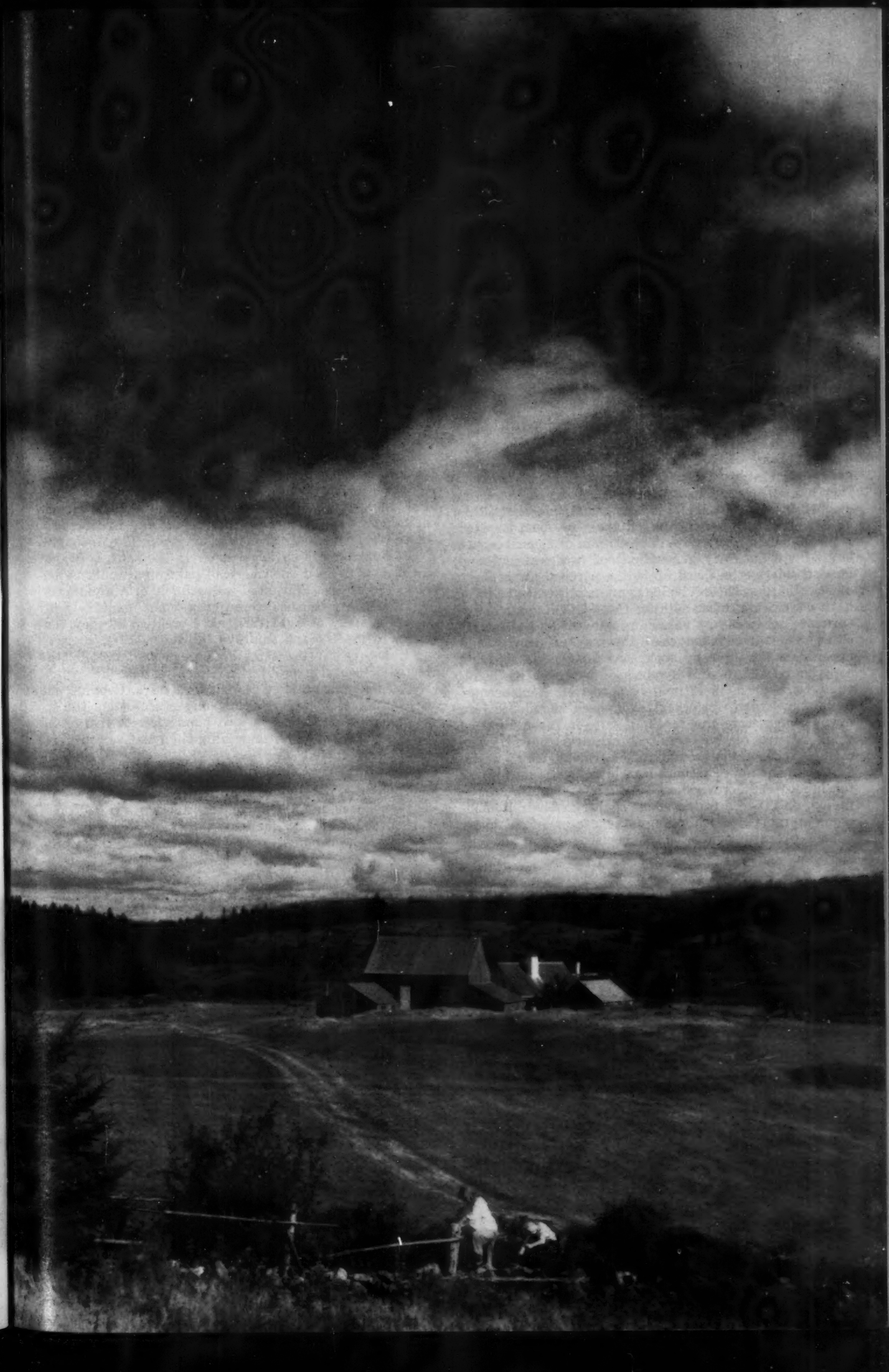
The architecture and the countryside from which it derives much of its character: above, Main Street Square, Nantucket; on facing page, landscape, Vinal Haven, Maine. Photos by Samuel Chamberlain, courtesy Hastings House.

The English tradition has indeed been like strong liquor to New England's architects. The majority of them have quaffed too deeply, and have slavishly imitated the Colonial style. A small but vocal minority have violently set the cup aside. Why do the two warring camps both mishandle such an old and pleasant vintage? One is irresistibly drawn to the conclusion that these intemperate reactions are based on fear. The so-called traditionalists seem afraid to go out and face the big world of architecture without the support of the Colonial style. The young radicals, aware of their parents' failures, blame them on the past. They seem to feel, however, equally insecure, afraid even to sniff tradition's heady liquor lest they become drunkards themselves.

Both camps agree in postulating tradition as a static, and therefore extinct, element of our culture. It has become like some worthless mummy, to be knocked about until it disintegrates in dust. Ignorance of its real character and value has led one side, in order to continue producing architecture, to copy various old styles. The other believes it essential to bury a set of antiquated rules which they consider long since dead. These two misconceptions, both essentially dangerous, have become the Scylla and Charybdis of our architecture, and they have nearly wrecked it. As in all radical versus conservative battles, both sides have lost the sense of growth, of continuity, of reference, which is the very essence of good wine, good architecture, and the good life.

Growth, continuity, and reference are all active concepts; and tradition, both as a body of ideas and as a reagent, is a dynamic force. There are times, to be sure, when its votaries are few. The Eclectic Era is a case in point. Yet in all periods there are architects who reference their work to the elements of their tradition and thus produce structures in harmony with their environment. For tradition, in its best sense, does not connote inability to change or adjust, either to new techniques or to new social patterns.

Even before Eclecticism, in the period which the sentimentalists look back on as "the good old days," New Englanders were busily engaged in modifying their original style as fast as they reasonably could. It is a demonstrable fact that at no time in the first two hundred years of settlement did the early builders consider the original style as a set solution. From the moment the Fairbanks House in Dedham (1636) was begun, to the advent of the eclectic revivals, the region's architecture grew up with the times. This is most clearly evident in a chronologically arranged group of pictures: for example, "Modern Architecture," by Professor Kenneth Conant, who obviously had no such idea in mind when selecting the plates. There could hardly be a greater disparity in feeling, form and detail than between the decorative medieval massing of the Turner House (House of the Seven Gables) and the neo-classic grandeur of the Hastings House. In fact, during the period between the first English Colonial and the Greek Revival, New England underwent a complete change in its economic and intellectual atmosphere; yet the latter style produced some of the most charming houses in the region, buildings which are today considered native in the best sense. In the face of the conventional architect's psychoneurotic reaction to flat roofs and big windows, it is interesting to note the steady decline in roof pitch and the steady increase in glass area during the same period. Seen chronologically, the transition from the steep pitch of 1636 to the flat roof of the Athenaeum in Portsmouth was a long slow process, involving hundreds of houses. The same is true of windows. The small hole in the wall of the Fairbanks House developed through many stages to the magnificent



full-length windows of the Hastings House. The Athenaeum's two upper stories are almost one third glass.

Yet, in spite of these and many other changes in form, the quintessential atmosphere of the region's architecture remained the same. While individual elements were modified several times, certain fundamental principles were adhered to. A "Greek" porch may have been added, and tall windows, yet the best houses did not become "Greek," or "Italian," but retained a strong native flavor. And it is this homogeneity, rather than their feeble old age, which makes New England towns, at their best, so very charming. For day-to-day pleasure in architecture depends on more than a single building; it is the next six or sixty houses which make up one's environment at any one moment. If these buildings are pleasant, it is because one senses a continuity, an appropriateness in the whole, which transcends any single house. The fact that there may be, side by side, Colonial and Neo-Classic and Romantic architecture, is secondary. The success of any one example depends on how well it has been adapted to the basic theme. If that has been well done, there will be no clash, even between adjacent houses of widely differing styles.

The real basis of this harmony was a practical intelligence which welcomed innovations for the opportunities they offered to enlarge windows, make use of the attic, or open up the plan. It is no secret that this vigor, this ability to absorb and command the new, has deserted New England's architects. The stream of consciousness enjoyed by the early generations of practical and creative builders soon dried up in the parched atmosphere of eclecticism. The revivalists, by definition outside of native tradition, have nothing to add to it, and in return are incapable of absorbing the wisdom it has to offer. They have abandoned the way of growth and experience for the copy book, or rather three separate copy books. The major symbols of this creative bankruptcy are those illegitimately conceived Romanesque, Renaissance, and Gothic extravaganzas introduced into towns which were the result of two or three hundred years of progressive architectural development. The maintenance of that community harmony which is essential to the appreciation of architecture is an idea as foreign to these revivalists as their styles are to the region, and indeed to the whole country. Their Romanesque libraries, which occupy the center of so many village greens, could well be replaced by automobile graveyards without a noticeable decrease in fitness.

Slightly less perverse, yet equally unproductive of live architecture, is the current dependence on the home-made textbook. English Colonial architecture, like a once-fine pair of red flannels, has been stretched so many ways and washed so often that all its gimp and color have gone. This is particularly true of the revival of the Cape Cod Cottage. The austerity of the original form has been lost by the enforced inclusion of functions heretofore unheard of. Furthermore, the self-styled traditionalists who perpetrate this costume architecture are actually retracing the forward steps taken during the "good old days" which they so fondly believe themselves to be recreating.

As if this hodgepodge were not already well supplied with imitations, there has recently been added yet a third set: those of the European post-World-War-I functional style. But this group is small, even if one includes in its members those esthetes who can turn out at a moment's notice either "Colonial" or "Modern" using an identical floor plan. There are few, I believe, who will not second their nomination for oblivion. The failure of these copyists to produce architecture has been complete, in spite of the fact that, unlike the predecessors of the eclectic period, they have a few examples of the genuine article right in their own back yard. For, in adding to its store of fine architecture various buildings designed by Messrs. Gropius and Breuer, and, more recently, a pair of houses by Frank Lloyd Wright, New England has enriched itself in the same way that a collector of modern American paintings would be enriched by the acquisition of a Burchfield or a Kandinsky. Furthermore, because these men come genuinely by their manner, because they have created it, they continue to modify and improve it. With them, there is no necessity for the same stale rehash of details perfected a century ago which characterizes the typical New England architect of today. Messrs. Gropius and Breuer have, as well, given younger architects the inestimable advantage of a first hand view of live architecture in the making, something their native confreres have been unable to do.

Certain principles of the International Style are, furthermore, essential to a live architecture, whatever its locale. These might be generally described as those forms, products and methods based on biological and technical developments adopted throughout the world.

Left, Fairbanks House, Dedham, Mass.; right, Turner House (House of Seven Gables), Salem, Mass.

Photos of Turner House, Fairbanks House, Athenaeum, from Essex Institute

More particularly, the Internationalists have given us the concept of planning for use. They have succeeded in expressing the lightness of modern materials; that is, they have broken away from the vestigial esthetic which made all buildings, no matter what their structure, look as if they were wall-bearing masonry. They have succeeded, both technically and esthetically, in introducing modern glass products into architecture. They have done the same thing for flat roofs. For them, manufacturers' catalogs and the yellow pages of the local telephone directory have been an infinitely valuable, fascinating mine. This raw material has been molded, first, according to the functions of the material itself, and secondarily, to man's biological needs. The third aspect of human beings, that complex of emotion, usage, history, tradition, etc.—in short, the ideas men live by—has been necessarily ignored, in order to achieve internationalism. For men do not hold these things in common. Their traditions vary widely, even within the same country.

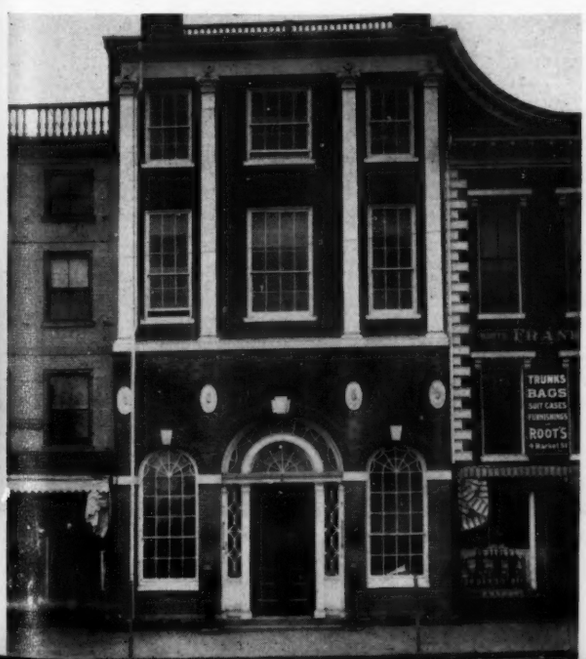
"Man does not live by bread alone"; nor does a biologically correct house, ideally designed to the limitations of the materials of which it is made, suffice for his dwelling. One of the truths we have learned from the group of doctors and psychologists who correspond in their field to the International Style architects, is that the individual's emotional balance is dependent to some extent on his sense of participation in a continuous and rational society. Architecture is one of the prime methods by which this feeling for synthesis is expressed and kept alive. It has a story to tell: of man's feeling for his past, of the realities of his present, and of his hopes for the future. The architect tells this story by means of techniques, and, almost, in spite of himself. The Internationalists tell us that the past is non-existent (too much to bear), the present mechanically productive, and the future, of which they permit us a glimpse, one in which biological standardization has become complete. One feels that, having suffered one of the world's most devastating collapses, their capacity and desire for the realm of feeling have been exhausted. Therefore they have over-developed their technical side. In reality, the resolution of these two spheres, of techniques and emotion, is the architect's task. If engineers to invent anew and builders to reproduce existing work were sufficient, the very word "architect" would not exist.

There are few practitioners who can be truly classed as both contemporary and New England architects. The fact that there are some is, however, a good sign for the future. The Koch House, for example, is obviously more than a mere statement of the ideology of the International Style. One feels a return to the region's traditional qualities of small scale, lightness of structure, delicacy of detail, and simplicity. The progressive elements of the new style are being absorbed and adapted to local conditions. The long-term modification of the roof line is taken up where it was left at the beginning of the revivals. The vernacular shed, both technically and esthetically, is becoming an integral part of the region's tradition. The fact that there are so few buildings in this spirit in New England is a sad commentary on her architects' competence.

Contemporary lack of initiative is, by many architects, laid proudly at the altar of the past. Its votaries would have us believe that tradition is their conscience, against which they weigh the new, and, I am sorry to add, usually find it wanting. This is because they conceive of tradition as an object like a standard one-pound weight, rather than as a set of qualities. They forget that a building is out of, or in, tradition depending not on its style, but on whether or not it contains those elements constantly present in the environment into which it is placed. What these qualities are, and how they come to appear so often, is a much more difficult matter to understand than the techniques and formulae of the architect's other sphere. Climate, local building materials, native skills, do not completely explain a consistent regional approach. For several different characters are obtainable with most building materials. The insistence on certain specific qualities can only be explained by the outlook of the people themselves. One is forced to the conclusion that New Englanders simply do not choose to run their architecture otherwise.

The native seems to inherit a strong emotional bias, a set of traditional prejudices which color everything he does. One of the chief ingredients of this complex is, I fear, a congenital agoraphobia. In this respect he is the exact opposite of the wild-and-wooly westerner who has an equally strong tendency towards claustrophobia. That anthropological variety is apt to feel like a steer in a china shop, in the thicker type of "Ye Olde Colonial" atmosphere. He believes, and loudly proclaims,

Left, Athenaeum, Portsmouth, N.H.; right, Koch House, Belmont, Mass.



Stoller

that New Englanders are snobbish, repressed, conservative, and exclusive, and he is absolutely correct. But they are also self-sufficient, retiring, unostentatious, and intellectual. The natives are invariably surprised when they hear these things, for they try so hard to be that way that they cannot believe they have succeeded. This lack of self-consciousness (sometimes called insularity) makes their prejudices doubly effective as architectural controls.

The reclusive, ingrowing quality which characterizes the northeasterner is ever present in his house. It sets back a space behind a pair of elms, or their stumps, and looks out on the curious with a slightly forbidding eye. It is further separated from the world by a fence, which, like the porch, has been victimized over the years by many "treetments." The intellectual bias is equally evident in the recurrent insistence on a formal, almost literary quality. This by no means resulted in the symmetricality clung to so deferentially by the copyists. There are as many asymmetrically massed buildings and facades as there are symmetrical. Indeed the common neo-classic house with its northeaster at one side of the gable end, and its Doric or Ionic porch on the long wall, under the eaves, is the antithesis of the purely axial approach. This feeling for an interesting mass has resulted in the typical articulated house, shed, and barn, strung out in a line perpendicular to the street, and maintained as the basic form through Colonial, Classic Revival, and Romantic periods. It is hard to imagine a more logical and at the same time more esthetically satisfactory solution to the housing of three different types of activity. The distinct, simple, interconnected blocks of these early houses are fine examples of the classification and expression of different functions. Though the resulting building is often very large, the system of articulation keeps it in scale with man and the landscape.

Perhaps the most important of New England's qualities is smallness of scale. The region and its architecture are both diminutive. The low ceilings, the compact plans, the regular outlines were undoubtedly, at first, a function of the weather. The winter cold versus the open fire was a good reason for keeping the size of the house down. Yet climate, year in and year out, has had, unfortunately, nothing new to offer, while the heating engineer has. His ingenuity has made practical gargantuan structures, which are almost invariably antipathetic to the native taste. The more grandiose Victorian efforts are a case in point. The reason why the original scale remains appropriate lies in the physical character of the region itself: its low hills, narrow brooks, shallow valleys, and short vistas. The typical New England landscape is apt to be tinged with an obscure nostalgic quality: it is sad, ingrowing, and old. It requires simplicity. It looks with a sour eye on ostentation. In this Lilliputian landscape, small-scaled structures are almost mandatory.

Given this scale by nature itself, the region's architecture responds with a marked simplicity and lightness of structure. Simplicity and small scale go together. In the same way that a tiny woman in a complicated dress is apt to look like a marionette, a very small building, if its masses are broken up, is apt to look gimcrack. The plain quality inherent in New England's best architecture was undoubtedly fostered by the early use of the wood skeleton. The posts, girts, summers, and pegs of the 17th century are the exact counterparts of the columns, spandrels, girders, and rivets of the 20th. This type of structure presents the designer with a large three-dimensional module which leads almost automatically to simplicity. New England's favorite braced frame developed naturally from the earlier construction. The slender upright studs of the partitions suggest, before they are closed in, some pluperfect Elysian grove. They define space, without confining it. Their vertical contrapuntal rhythms were, furthermore, reflected throughout the early houses; in the back of the Windsor chair, as Siegfried Giedion has pointed out; in the vertical wood wainscoting; and in the plain turned balusters of the front stairs. This linear quality is part and parcel of the exterior as well. The early houses were striated horizontally by the fine lines of the clapboards, while the neo-classic houses used horizontal and vertical flush boarding, often together. The basic scheme is an extremely plain surface, carefully proportioned and divided, with very fine detail.

Nantucket, Mass.: harmony obtainable when progress is unselfconsciously accepted: above, Jethro Coffin house (1686), story and a half, with small, leaded, diamond-paned windows; right, Elihu Coleman house (1722), two full stories, larger windows; right below, Neo-Grec house built by Wm. Hawden (1845-6).

This smooth, delicate quality has never been successfully replaced. Yet the material itself does not completely explain the unswerving adherence to the principle of the flush surface, for the same quality is found in New England brickwork which has none of that rich detail so typical, for example, of Tuscany. Instead, emphasis has always been placed on color and on surfaces interesting because of the minute variations in the small units of which it is composed. Texture makes up for lack of detail. One notable exception to this usage is the vertical reveal sometimes seen in early chimneys. Their fatness, now faked by hundreds of respectable architects, was then a matter of necessity. The great mass of brickwork contained two or three fireplaces and a couple of ovens, and their flues.

The pairing of this massive heating and cooking unit with a delicate and minute staircase is very typical. The contrast between the two, in plan, is staggering; a sort of unholy matrimony of the Mr. and Mrs. Jack Spratt variety. In actuality, one is not aware of any discrepancy in size, for the marriage was functional, and, like that of the Spratts, particularly felicitous. The fireplace is as important to the emotional scheme of things in New England as the chimney was to the house. The native character is retiring and clannish. The hearth is the symbol of self-sufficiency and self-communion. The grandiose staircase is, in contrast, considered a shocking ostentation. It is interesting, therefore, that this combination of the big chimney and small staircase should appear again in several modern houses. In reexamining the house, and thereby giving each element its proper weight again, the younger architects seem to have gone back to the old combination without specific intent.

Photos by Samuel Chamberlain, courtesy Hastings House

Up to the advent of romanticism, the mantlepiece and indeed all the details were never allowed to become so rich as to endanger the austere quality of the whole. Ornament which must confine itself to the thickness of a ¾" board simply cannot become rococo. In fact, a large part of the architecture of the region has practically no detail at all. The cornice projects narrowly. Window trim is plain, and is given definition principally because the clapboards die against it. Even in the more luxurious houses the refined and painstaking white pine moldings are carefully subordinated to a simple, unpretentious, intellectual total character.

The modern style will, I am sure, develop these traditional tendencies even farther. For there is nothing inimical to plate glass, to flat roofs and functional planning, in the small, simple, articulated architecture typical of New England. On the contrary, many of the new techniques and biases are better adapted to the expression of native feeling than any the earlier builders could command. The intellectualization of the use of materials and of detailing, so typical of today, is a type of approach which should recommend itself to New Englanders. So should the tendency of progressive architects to classify and express differing functions in large, simple blocks. Again, the feeling for lightness of structure so characteristic of modern architecture is part and parcel also of the native tradition. Such parallels could be drawn indefinitely. Why is it, then, that contemporary architects feel our era to be basically out of harmony with those mythical good old days? So was the Neo-Classic style basically at variance with the first, quasi-medieval English Colonial architecture. Yet from today's vantage houses built in both periods bear the most distinct family resemblance.

In this day of strong scientific and social emphasis, the conservative designers have returned to an architecture of the long underwear and backhouse era. The radicals would have us believe that, like Minerva, they have sprung forth fully armed; that they are capable of spinning an architecture out of brain alone. They would have us believe this in the face of proof by their scientific-minded contemporaries, the very group which they claim to parallel, that such a birth is impossible. The emotional content of architecture, that element which makes it an art rather than a craft, seems to have escaped both groups. In their lopsided repudiation of feeling, they are but half-architects, mermen, centaurs.

The designer's special function is to develop both the technique and content of building, and to reconcile the two. Thus a live regional architecture is one in which each new building is an individual expression of native feeling in terms of progressive techniques. The technical sphere is in the realm of science, and thus international in scope, in that a static structure can be duplicated anywhere. The content of building, on the other hand, springs from local conditions, and tends to be irrelevant away from its home place. The region is probably the largest unit in which the special demands of both man and nature can still be thoroughly mastered by the architect: a prerequisite to their synthesis and expression in terms of building.

New England is liberally endowed with native character. In addition to her own inhabitants' technical proficiency, she has the whole wide world to call on for support. But the will to synthesize the two is lacking. On the one hand, a Colonial death mask is offered; on the other, a still-born machine for living. The architect has still to achieve that fundamental adjustment of his two realms which is essential to fine architecture. He has still to experience that sense of continuity, reference, and flexibility which would allow him to profit by and add to the old vintage.

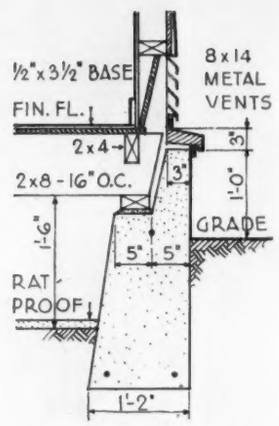
Photos by Roger Sturtevant

The high, old-fashioned apartment next door "is not such a bad thing," Mr. Wurster comments. "In San Francisco we have a strong west wind in Summer from which we need protection."

One in a Million

City House in San Francisco

WILLIAM WILSON WURSTER, A.I.A., ARCHITECT



TYPICAL FIN AND VENT UNIT SECT

0 1 2 3 FT.

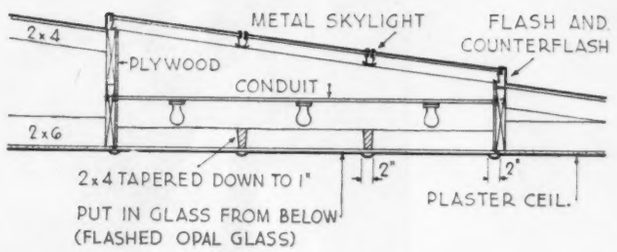
In the June PENCIL POINTS, we listed a few basic questions that we ask in judging the success of architectural work. Checked against these, this remarkable, small, city house is nothing short of excellent:

For what purpose was this designed? What persons will use it and how? It was designed as the home and studio of a couple, both of whom are professional musicians. The husband is a violinist with the San Francisco Symphony Orchestra; his wife is a pianist who gives lessons at home. It is frequently necessary for the husband to practice at the same time that his wife is giving lessons; hence, space allotted to these activities had to be completely separate. Over and above these primary and extraordinary considerations, the family wished a pleasant two-bedroom home with as many of the usual amenities for daily living and entertaining as the budget and the architect's skill would allow.

How well does it meet their needs—in plan, design, and amenity? The piano is located in the living room, on the garden side of the house, toward the south; the smaller of the two upstairs rooms at the extreme front of the house is used for violin practicing, as well as for a guest bedroom; a long, centrally placed entrance hall separates the two rooms as widely as possible. A sliding door between the living room and hall, and acoustically treated ceilings in the second floor rooms further insure the success of the arrangement.

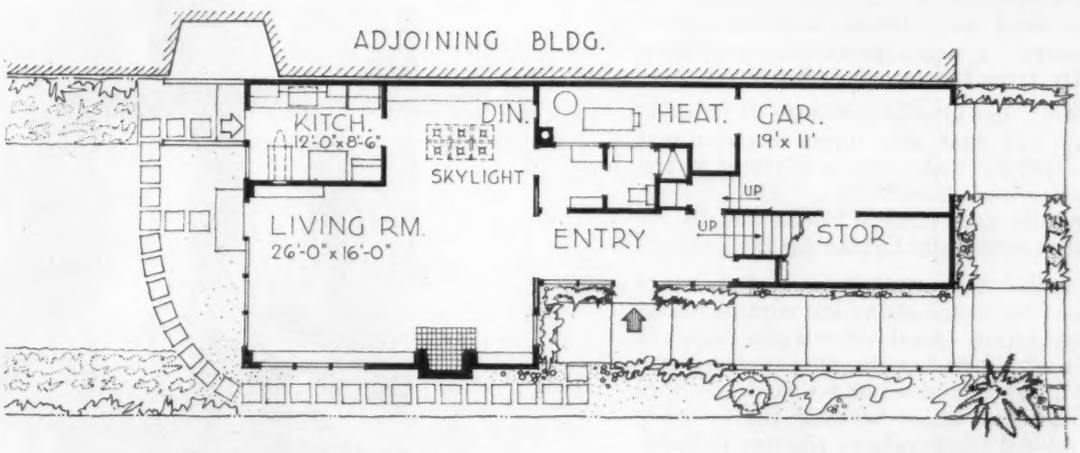
Otherwise, the plan is an exceptionally well thought out disposition of the long, 30-foot-wide space available. At the street front, above the entrance passage and the garage (alongside which a large general storage space is provided) are the two bedrooms and bath. This ar-

The living room-music studio; the dining alcove (below) may be closed off by means of a ceiling-height curtain



RECESSED DINING CEILING LIGHT

0 1 2 3 FT.



MAIN FLOOR

0 5 10 15 FT

N

William Wilson Wurster, Architect

Mr. Wurster comments on the general contracting work, done by C. Lindberg of San Francisco: "He did a superb job of craftsmanship, taking particular care with the choosing and placing of the plywood."

Entrance hall

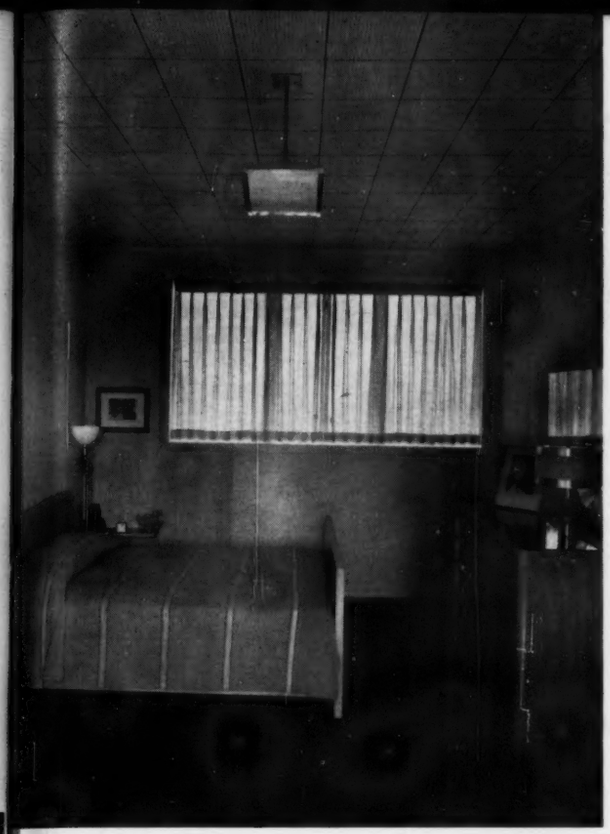
Passage to sun deck

Kitchen

rangement gives each of the bedrooms southern as well as northern exposure; a small, protected sunbathing deck opens directly from the larger bedroom.

On the garden front, the kitchen entrance is shielded by a simple wing wall that also forms a convenient screened area for garden tools, refuse containers, etc. While the dining alcove is, admittedly, an interior area, it has a good skylight and, since it opens directly off the living room, it is sufficiently lighted for the purpose.

How well was it built? Very well, indeed, of standard frame construction; the detail shows the wise provision for under-floor ventilation. All interior walls, except in the bathroom, are of selected, white-pine-surfaced plywood, butt-jointed, lightly stained and waxed. Ceilings (except in the bedrooms where acoustic tile is used) are of integrally colored (light yellow) plaster. Exterior walls are of untreated cedar shingles, with sash and overhangs painted white. The house is heated by a



Main bedroom

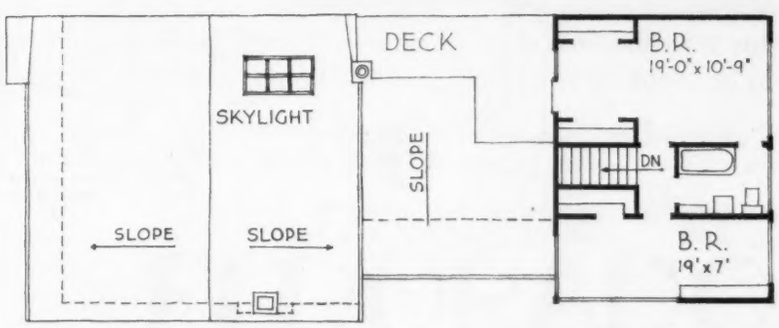
gas-fired furnace with forced-air circulation.

Does it make intelligent provision for the use and enjoyment of the free elements of air, sun, and a bit of green? Yes, it does: big windows in every room (except the dining alcove, which was a necessary compromise due to the long, narrow site) ; main living rooms and garden and sun deck oriented to the south, a formal bit of planting in front of the house and a delightful, enclosed garden at the rear.

What is its relation to neighboring facilities? How does it assist healthier community development, a better environment, a better world? Since the architect had but the single house to design, he had to work within the limitations of existing neighboring facilities. But by his skillful design, he has made a real contribution, not only to this particular block in San Francisco, but to city development in general.

Entirely appropriate in scale and proportion to a residential neighborhood, it is a distinct improvement in plan organization and appearance over what usually is built on a restricted city lot. It is interesting, not surprising, to learn that no house the architect has designed has elicited more inquiries whether it is for sale or rent.

Combined guest and practice room

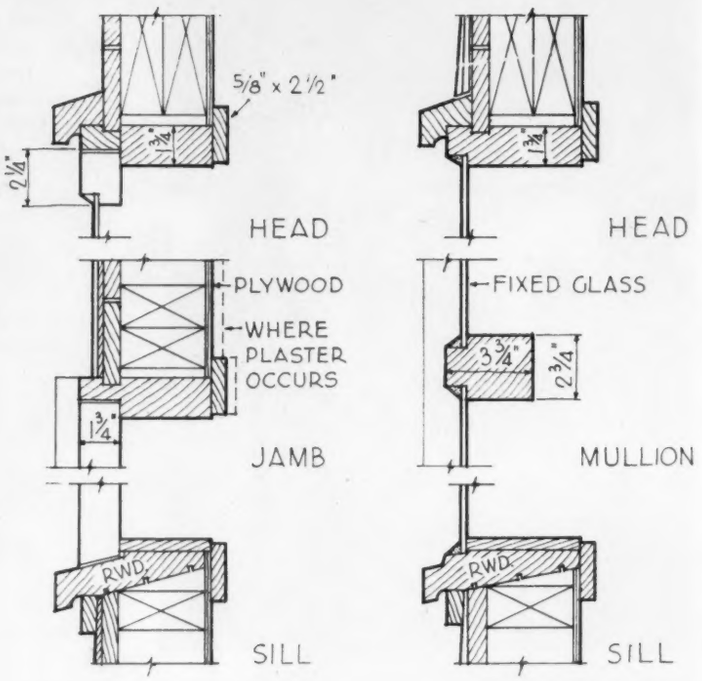


UPPER FLOOR

0 5 10 15 FT.

Selected Details . . .

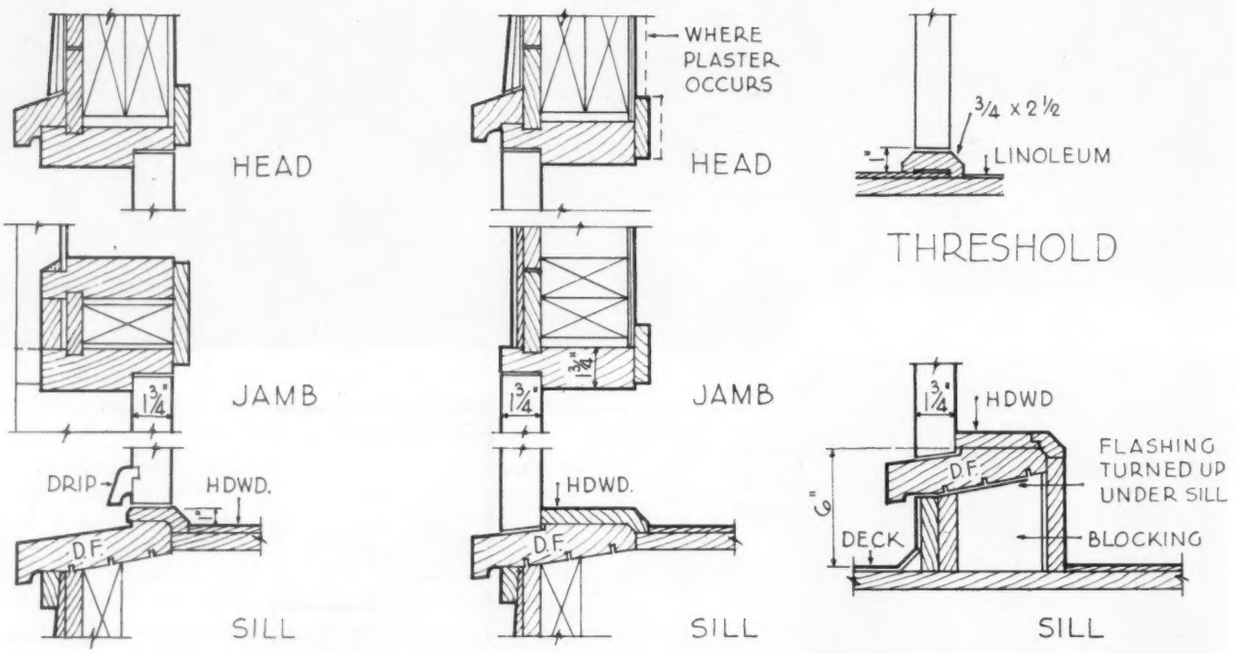
Door and Window Details, City House; William Wilson Wurster, A.I.A., Architect



TYPICAL WINDOW

FIXED GLASS

WINDOW DETAILS



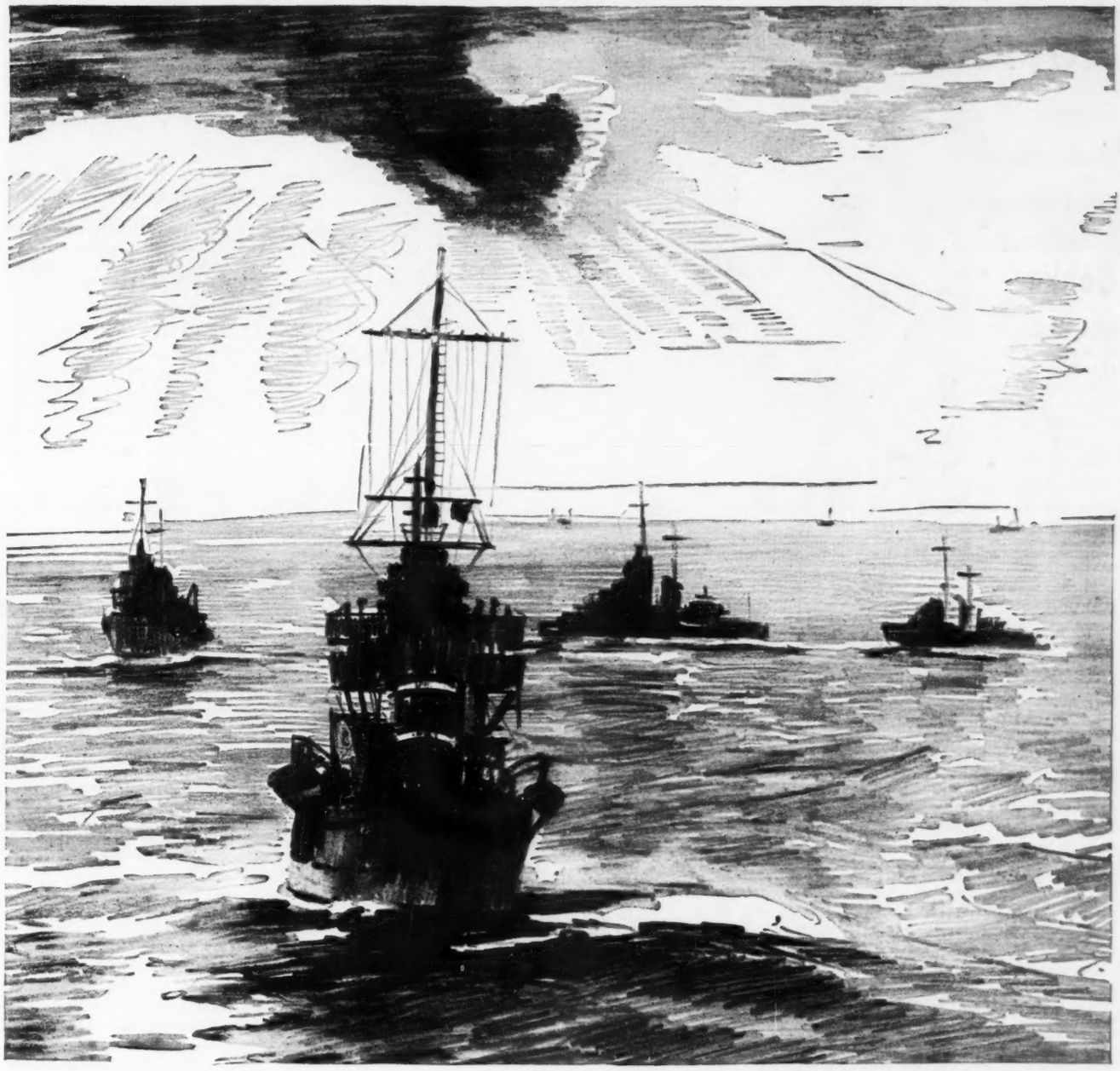
ENTRY DOOR

L R-KITCH DOORS

DOOR TO DECK

DOOR DETAILS

SCALE · 1 1/2" = 1'-0"



Drawn by R. Rose Kappel with Official Naval Approval

The afternoon sun slants down upon a formation-line of destroyers executing a turn somewhere in the North Atlantic.

In this drawing, the artist exhibits the sweeping range of Typhonite Eldorado pencils. Their power is demonstrated in the rich blacks of the ships and in the dark areas of wave and cloud. Their subtlety and responsiveness are illustrated in the soft, delicate tones of light sky areas — and in the glancing grace of the sunlight as it rides the waves and gleams on the foreground destroyer.

What is your favorite drawing pencil? If it is not Typhonite Eldorado, we invite you to write to us for free samples of the degrees you are using.

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Books

HOUSING

Housing for the United States After the War; a report of the Committee on Postwar Housing of the National Association of Housing Officials. National Association of Housing Officials, 1313 E. 60th St., Chicago 37, Ill. Price 50¢, reduced prices for quantities.

This report embodies three years' analysis by the Committee on Postwar Housing of problems that must be solved if all Americans are to have adequate homes. It defines these problems and recommends an approach to their solution integrating the best ideas that have gone into progressive city planning; private building enterprise; sound governmental administration; technical research; and equitable home financing. The table of contents includes seven parts: The Objective; Adequate Housing for All Families; Providing Adequate Housing; Housing in the Urban Community; Rural Housing; Governmental Agencies—Local, State, Federal; The Immediate Job; Citizen Participation.

TECHNICAL BOOKS

Practical Shop Mathematics, by John H. Wolfe, Supervisor of Apprentice School, Ford Motor Company, and Everett R. Phelps, Associate Professor of Physics, Wayne University. Vol. I (Elementary), 4¾ x 7½, 331 pages, illustrated; Vol. II (Advanced), 4¾ x 7½, 330 pages, illustrated. McGraw-Hill Book Co., Inc., New York, N. Y. $2.20.

Mathematics for the shop and drafting room, as taught at the Henry Ford Apprentice School, are here arranged for home study—including 50 plane geometry propositions, general method of attacking shop problems involving trigonometry, explanation of planetary gearing, special method of attack for compound angle problems reducing them to one of 5 different types.

Introductory Shopwork, by M. M. Jones, Professor of Agricultural Engineering, University of Missouri, and A. Axelrod, Instructor of Machine Shop Science, Bayonne Vocational High School, 6x9, 290 pages, illustrated. McGraw-Hill Book Co., Inc., New York, N. Y. $2.50.

This book shows how carpenters and mechanics handle wood and metal working tools, and why these methods save time and trouble—the 366 illustrations are said to "give many handy kinks and correct method—a fundamental shopwork course in themselves." The text deals with hand and machine tools, their care and maintenance, measuring and gauging in metal-work, measuring and marking for woodwork, sawing, planing, wood chisels, modeling or forming tools, painting, bench and vise work, metal drilling tools, pipe work, soldering and sheet-metal work, ropework, wiring, etc.

FURNITURE

An History of Modern Furniture from Prehistoric Times to the Post War Era, a GREAT BIG booklet (10⅝" x 14"), from the Herman Miller Furniture Company, is nicely got up somewhat in the literary style of a primer suggested by psychiatrists ganging up on defenseless normal American children aged three to six.

Among such basic statements as "People think that Chippendale designed antique furniture," and "That is a mistake," and "Chippendale was a modern designer (in the eighteenth century)," we wend our simple way—startled from time to time by printed shouts for "Herman Miller Modern"—to a rather distressing finis piece, a cartoon of a postwar "dream dresser," a kind of headless, tailless china pig with windows; the pig's windows open by pushing a row of buttons installed along its flank and out pop, in all directions, mechanical arms ending in hands or hangers holding out to you an article of clothing.

The whole seems to be another subtle and oblique left to poor old Chippendale's jaw. Research is by the late Gilbert Rohde, clever illustrations by Peggy Ann Mack.

But, children dear, let's pretend for just a little while that we're all grown up and can take a few moderately complex ideas into our heads. It's possible we could understand Herman Miller's modern furniture and like it, if it didn't come at us in big bold type; this frightens us. We plan to take the booklet home to Junior and read him this Story of the Three Chairs; we'd like to know what *he* thinks of it.

Periodicals

Reviewed by Margaret Greenough King

ARCHITECT AND ENGINEER. February 1944.

The nation's largest cafeteria at the Lockheed plant in Burbank, California, long-span wood roof trusses for a war plant, some fair apartments—Parklabrea Apartment, Los Angeles, California, a discussion of the postwar kitchen and especially the Libby Owens Ford kitchen, and some of the NEW PENCIL POINTS-Kawneer prize store fronts are in this issue.

JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS. London, England, January 1944.

At an RIBA conference on the education of children toward architectural appreciation, Mr. Clough Williams-Ellis, architect, delivered a lively and valuable talk on the subject. He uses strong words to describe the state of bad taste in England, generally, and the article in full applies to the United States as well.

The "Place of Science in the Art of Lighting," was the subject of a joint meeting of the RIBA and the Illuminating Engineering Society. Excerpts from an essay on hygiene in the reconstruction of England place stress upon an often superficially treated phase of planning.

BUILDING AND ENGINEERING. Sydney, Australia. January 24, 1944.

A plea for the decentralization of cities is here voiced. The main impression one retains after reading this magazine is that Australia will remain far to the rear of progressive countries for the quarrel between the modern and the artistic is evidenced in every page, and the use of the term "modernistic" indicates ignorance of the meaning of words. The issue can be summed up in this quote—"Also, we have yet to be convinced that the new order is better than the old."

JOURNAL, Royal Architectural Institute of Canada.

January 1944

An address given by Harold Lawson in October on "Regional Planning," covers the historical aspects and a brief report of present-day planning in England and America, and recommends immediate passage of a planning act. Some temporary buildings for the Department of Public Works, Ottawa, are published. The Architectural Research Group in Ottawa lights into the illnesses in the construction trades and building unions, remarking that the present craft structure is not in keeping with the development of more integrated structural techniques.

February

Two addresses published in part this month deal with the necessity for full cooperation between architects, engineers, and planners. A gymnasium for McGill University, and two private houses do not lead one to believe that Canadian architecture is terribly progressive, but a small office shown is arranged with simplicity.

March

This issue is devoted to church architecture, a sadly neglected phase of design. "Symbolism in Church Architecture," "Planning for the Church Organ," "The Heating of Churches," "Church Lighting," and "Trends in Protestant Church Building," are the most significant of the articles.

REVISTA DE ARQUITECTURA. Sociedad Central De Arquitectos, Centro Estudiante De Arquitectura. Buenos Aires, Argentina.

January

This magazine has made the New Year an occasion for declaring itself, for the first time, in favor of progressive design and national planning. Realizing that their architects have not been taking their part in improving the country's physical life, this issue pledges it-

(Continued on page 92)

BRIXMENT *Mortar is More Durable*

● FOR permanent strength and beauty, mortar must be *durable*—must be able to withstand the alternate freezing and thawing to which it is subjected many times each winter.

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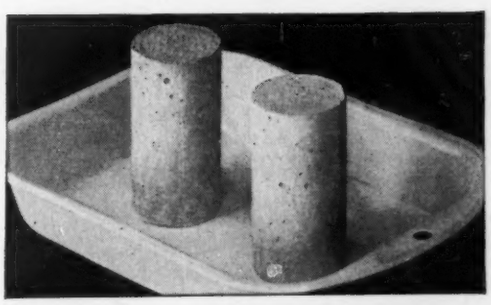
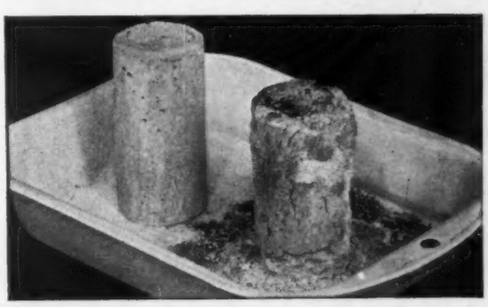


These two photographs show a cylinder of Brixment mortar (left) and a cylinder made with 50-50 cement and lime mortar (right). Both specimens were made at the same time, and subjected to exactly the same treatment.



After curing for 30 days, ¼" of water was put into the tray and the cylinders were alternately frozen and thawed 15 times. Note that the Brixment mortar remains intact, whereas the other mortar has crumbled badly.

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TIME AND LABOR SAVING CONSTRUCTION DEVICES FOR CONCRETE CONSTRUCTION

Reviews

(Continued from page 90)

self to a program designed to raise the architect to his proper place in public esteem, and proceeds to publish an excellent rural school, a good clinic, an interesting technical school (a student design) and some studies for a large child recreation area.

February

There are some houses here which show tendencies toward contemporary design and some that are either southern Georgian or rusticated ranch houses. However, the influence of the new principles of this magazine are evident throughout—happy sight! The article on the future of San Juan is headed by Herbert Bayer's cover picture for Sert's, "Can Our Cities Survive?" and summarizes the possibilities for replanning this city before it is too late. Such American cities as New York, Chicago, and Buffalo are cited as examples of forward-looking planning. An exhibition of the way people live in Argentina is covered by photographs and comments are that this sort of thing must be done to get full cooperation from the people for the success of a planning program.

INTERIORS.

January 1944

In keeping with a new policy, just beginning to show itself, the magazine leans more to architecture than to "decoration," and announces a series of articles called "American Designers' Ideas for Tomorrow." Those published this month are varied, and are the work of Ernst Payer, Richard Neutra, Paul Thiry, the Heythums, Paul Lazlo, and others. Unfortunately coverage is so incomplete as to be tantalizing and somewhat unfair to the ideas presented.

February

The editorial for this month recommends a change to the metric system in the interest of international harmony. Henry P. Glass has done a tidy packaged house comprising a basic three units to be used in any combination or multiplicity desired. Ernst Payer follows solar heating from the cliff dwellers to Morristown, New Jersey, 1942. Grand Rapids, seat of furniture manufacture, "looks toward peace" with some furniture ideas that can at best be called corny. J. Gordon Lippincott asks "Does Form Follow Function?" He finds it also follows new materials. Among other things, Carl Koch is given a good review, slightly poisoned by some amusing, if distorted, anti-Gropius remarks.

March

It is only natural that this magazine should sound most well informed when discussing remodeled night clubs and wholesale clothing showrooms. One of

(Continued on page 94)

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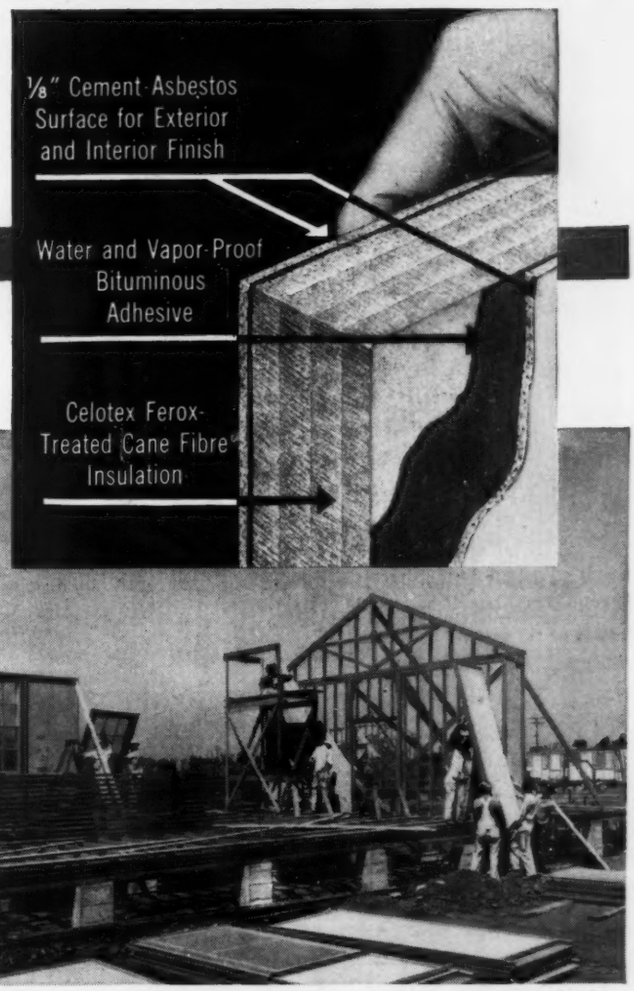
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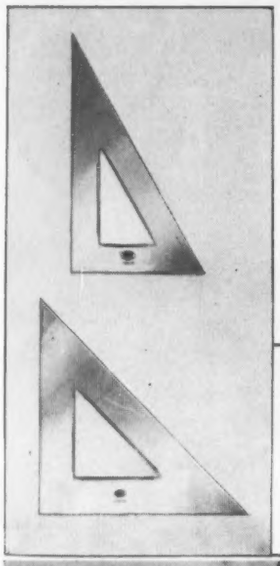

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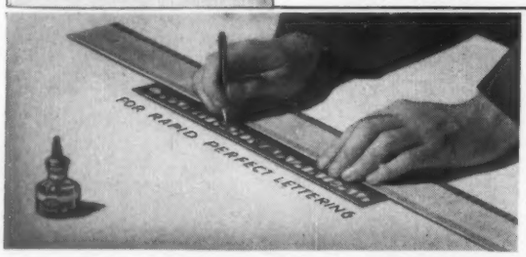

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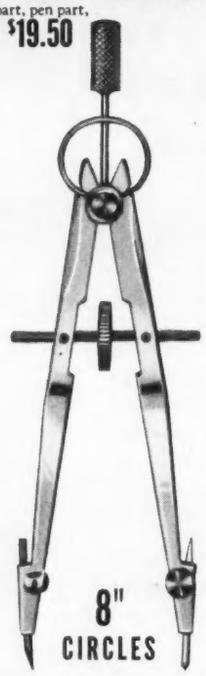

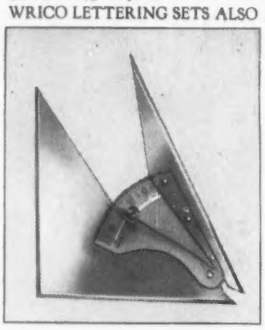

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Reviews

(Continued from page 92)

each in this issue. Again J. Gordon Lippincott writes intelligently about the need for knowledge of new materials in all fields of design.

April

Hotels, their modernization and position in the modern world, are covered by various articles this month. The best is that by Morris Lapidus who has some ideas on development of the functions of the hotel lobby. A fan of Dorothy Draper's writes of her lovely baroque curlicues and cabbage roses which, it seems, effectively hide many a neat bit of functional planning. Mr. Lippincott does it again in an excellent article on the difference between "monocoque" and "architechtonic" design, pointing out how they occur in nature and in man-made designs. For those who have been waiting to see how this decorator's magazine would take Robsjohn-Gibbings' lively book, "Goodbye Mr. Chippendale" receives its "professional" review amazingly tolerant though acid in spots.

News Bulletins

Latest among the growing list of periodic news bulletins published by state and local groups of architects is the "Bay State Architect," a four-page folder sent out monthly to the members of the Massachusetts State Association of Architects. It is an admirably concise and clear presentation full of informative news, excellently edited to be free of excess wordage. We predict for it a long and useful life.

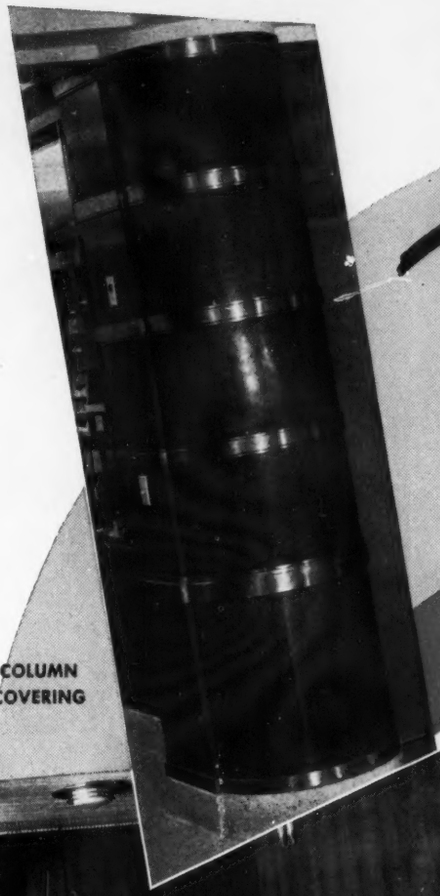
Planning Publications

Compiled by Margaret Greenough King

Your Inheritance, an Uncomic Strip. London, England.

The paper shortage has had one happy result in England: It has focussed attention on excellent pocket-size books such as this one. No better form of planning propaganda could be devised; though many publications claim to be aimed at the public, this, through make-up, writing, and purpose should actually impress "John Q" with the importance of planning. It makes no attempt to present staggering statistics, but takes a piece of land, any piece of land, from the day it was a forest, follows it through its settlement, urbanization, and finally its sinking into slums; asks why it has done so, how it can be improved, and how such things were prevented elsewhere. This booklet is a must for American planners who believe they can reach the public through masses of astounding figures. Illustrations are apt and the tone of writing is superbly gay in spite of the serious intent.

(Continued on page 96)



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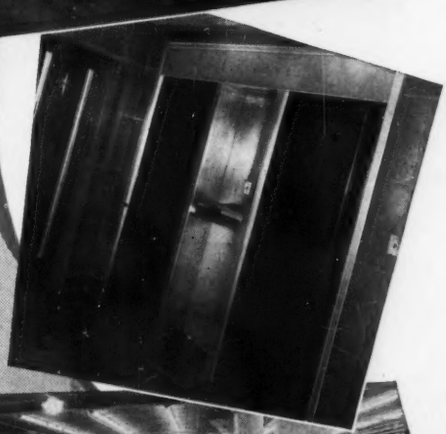

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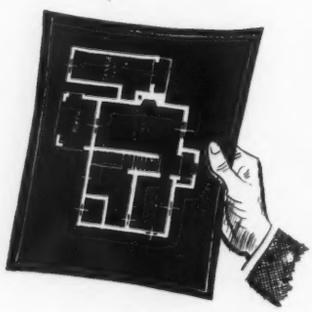

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Reviews

(Continued from page 94)

A Chart for Changing Cities. California Housing and Planning Association, 402 Jackson St., San Francisco, Calif.

This small, exceedingly compact and meaty booklet about the causes, "tempo and direction," and legal, educational, and physical methods for stopping urban blight, contains a short bibliography, an outline of recent laws having to do with redevelopment and housing, discussion of the value of the master plan, the necessity of "time-zoning" (i.e. short term zoning laws), the question of delegation to a specific agency of the right to acquire land, the need for development along neighborhood lines to enlist the support of citizens, and the very difficult problem of land assessment. These are all covered with admirably few words and give a clear picture of what is involved in rehabilitating the city. Definite recommendations are made for putting such a program into effect.

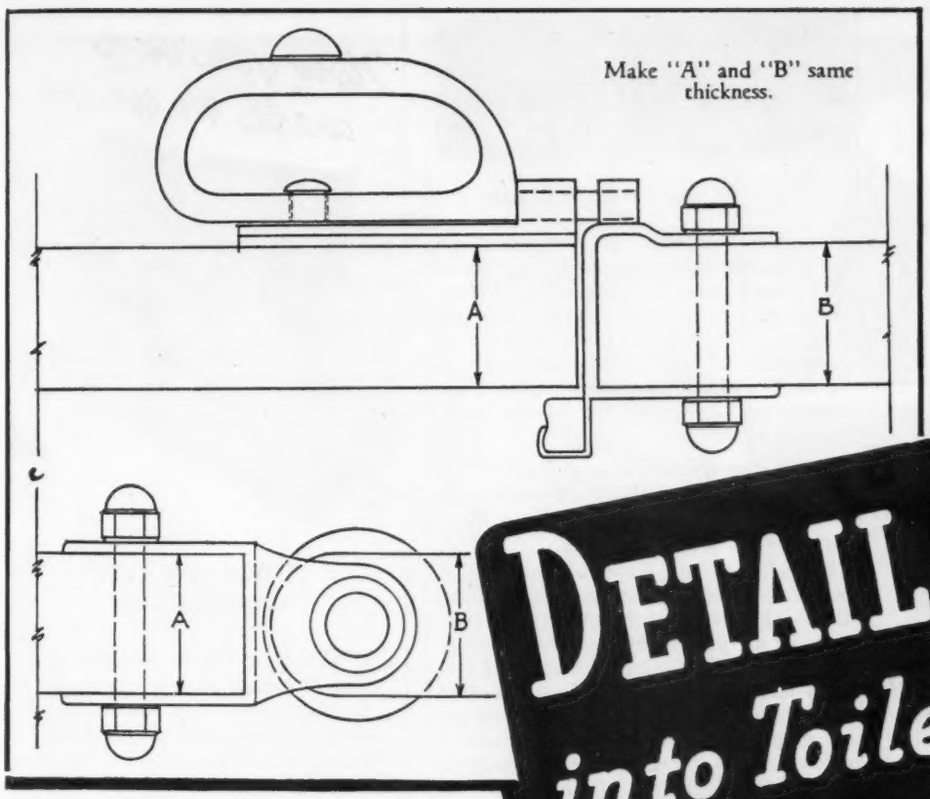
Then . . . and Now. Fifth Annual Report of the Housing Authority of the City of New Haven. 1942-43.

Some of New England's liveliest planning is being done in New Haven, though this report is pretty palid testimony to that fact. Elm Haven, Quinnipiac Terrace, Farnum Courts have, at the time of its writing been occupied for a year or more and this booklet concerns itself with the story of their operation, an important part of any rehabilitation project. Rents, incomes of tenants, selection methods, and general operating statistics are included. The pamphlet layout, however, does not show fully the success of these projects.

Post-War Housing. A Challenge to New England Communities. Prepared by the Community Development Committee of the New England Council, Statler Building, Boston 16, Mass.

A surprising set of statistics is contained in this thin leaflet, showing that: New England has a higher percentage of urban housing, a lower percentage of single family houses, a higher percentage of large houses, a lower proportion of substandard houses, a higher proportion of houses built before 1880, a higher average of owner-occupied urban and rural non-farm dwellings, a rental average of tenant-occupied urban and rural non-farm units only a little above the national average. To explain figures which seem absurd in view of the appearance of New England it must be remembered that the comparison is between New England's and a national average, not between New England and

(Continued on page 102)



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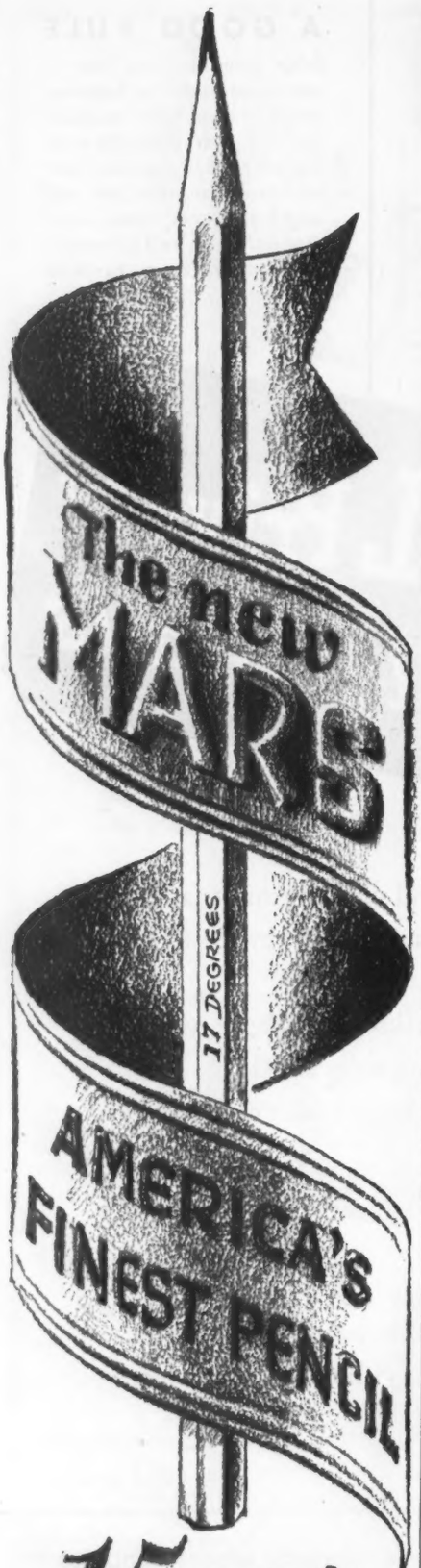

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Reviews

(Continued from page 96)

a comparable group of industrial and farm states. There is some discussion of postwar housing prospects. Modern architecture is considered "un-New England," but modern planning with an adaptation of "our" traditional style to fit modern plans "may be accepted." The remainder is a rehashing of the problems of blight and housing.

Air Photographs. Pennsylvania Planning, Commonwealth of Pennsylvania, Department of Commerce, State Planning Board. February 1944.

The value of air maps in planning is made startingly clear in this publication. The State of Pennsylvania completed air-photographing the entire state six months before the war and this data has proved invaluable in locating war plants and highways and is now being employed by various communities as a basis for postwar planning because it shows relationships of different use areas, dwelling types, roads, etc.

Your Home. Housing Authority of the City of Vallejo. March 1944. Prepared by Hilde Reiss Friedman, Technical Consultant.

An effort to improve the standards of the furnishings in this housing project is evinced in this booklet published regularly by the Housing Authority. "Notes on Design," with the aid of sketches, points out the merit in simplicity and lightness in house furnishings. "Light and Lighting" through diagram and sketch points out the basic principles of good lighting. "Discovered on the Projects" is devoted to photographs of good furniture that has been built into various homes on the project, naming the families who did it, thus providing an incentive for others to follow suit. "Victory Apartments" makes suggestions for arrangement of furniture to increase liveability. "Of Interest" is devoted to notes on doings of families living at Vallejo. Certainly such a publication encourages good living, and happiness at being a member of the group. It's excellent insurance against deterioration of the houses.

Planning Progress. (1943) City Plan Commission, Kansas City, Missouri. March 1944.

This city has taken a realistic approach to the solving of its planning problems. Cooperation between the plan commission and city officials has resulted in a compilation of the basic data necessary, an analysis of this data, and the development of the method by which long term planning is to be accomplished. In itself this booklet is not much more than an outline, with more complete publications promised for the future.

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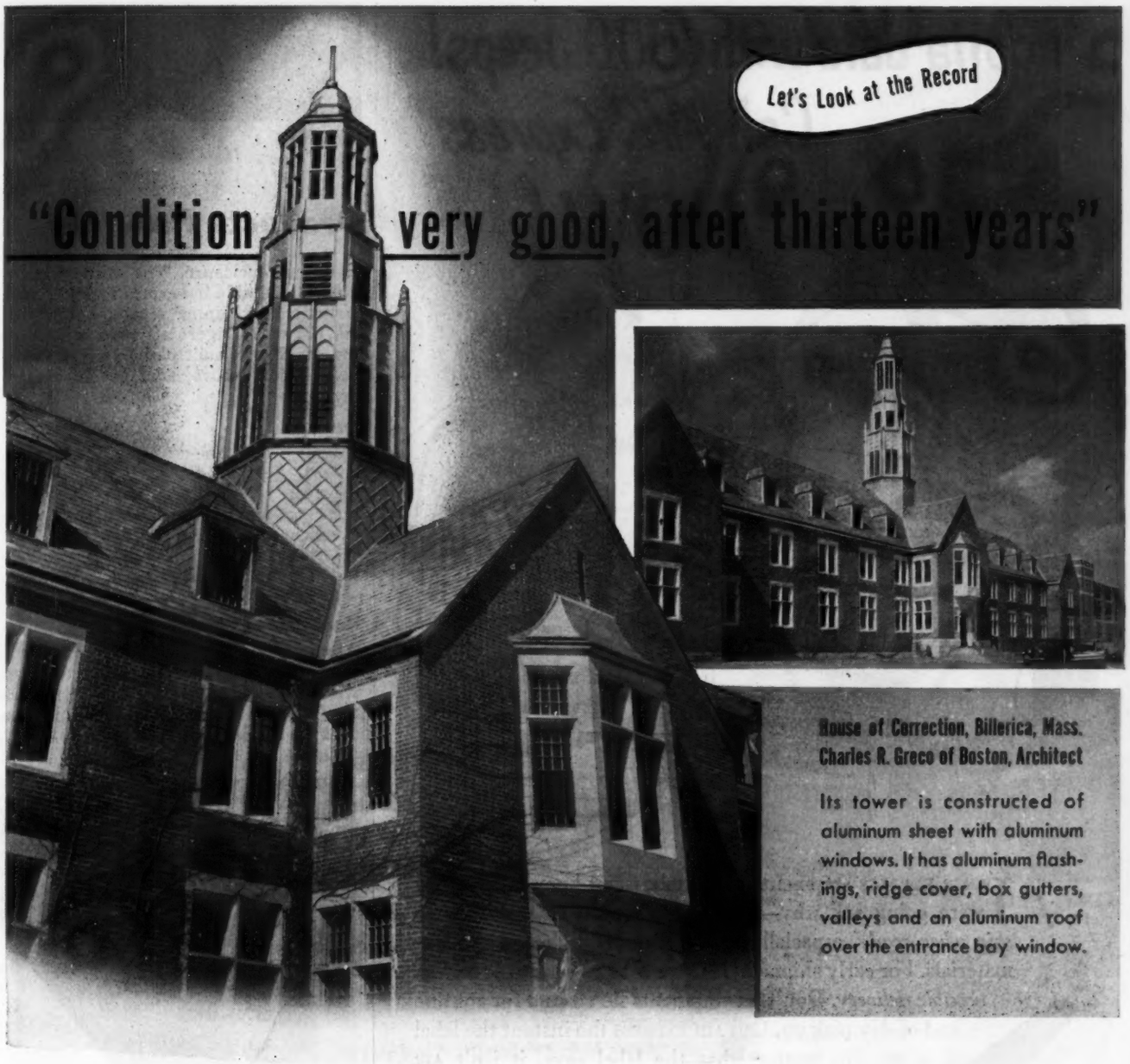
Let's Look at the Record
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House of Correction, Billerica, Mass.
Charles R. Greco of Boston, Architect
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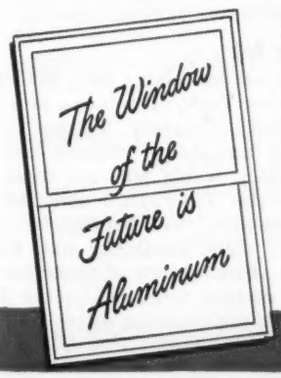

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News

(Continued from page 24)

Products Progress

or welded enclosure. The insulated conduit is available in several types of construction for piping steam, hot water, oil, hot or refrigerated process liquids, for single or multiple pipe systems—installation above surface or underground.

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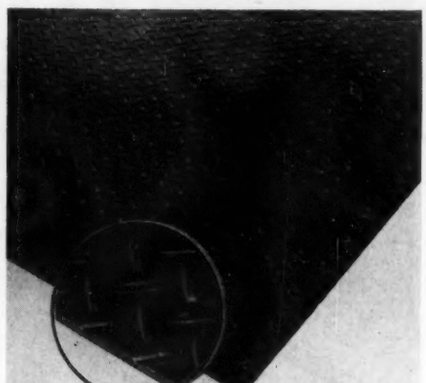

for use in building entrances, lavatories, shower and stair treads, landing mats, on ramps, in front or back of counters, and for covering worn spots on floors. It is jet black, comes 29" x 63" x 9/64" and can be trimmed to fit smaller or odd-shaped areas. Its makers claim it does not swell as rapidly as rubber where exposed to various types of oils.

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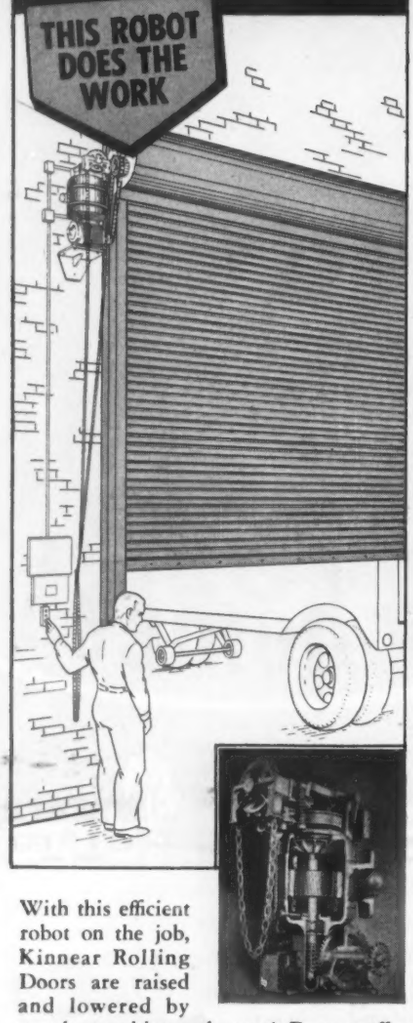

With this efficient robot on the job, Kinnear Rolling Doors are raised and lowered by merely touching a button! Door traffic is speeded up, and since doors are not left open through neglect, heating and air-conditioning costs are substantially reduced. Added to the space-saving efficiency, the protection, and eye appeal of the rugged Kinnear inter-locking-slat construction, this means thorough door satisfaction for any client! Check a few construction features of the rugged Kinnear Motor Operator: machine-cut gears of chilled nickel bronze, worms of nickel steel, bronze and graphite oilless bearings — proof that it's engineered for long, faithful service! And every Kinnear Motor Operator is matched to the load requirements of the particular door which it is to operate. Write for full information today! The Kinnear Manufacturing Company, 1900-20 Fields Ave., Columbus 16, Ohio.

SAVING WAYS IN DOORWAYS

KINNEAR ROLLING DOORS

Views

(Continued from page 18)

ROBERT O'CONNOR AND ARTHUR HOLDEN

At a meeting of the New York Chapter of the A.I.A. on June 7th, 1944, Robert B. O'Connor, the retiring president, in turning over the office to his successor, Arthur G. Holden, concluded his valedictory remarks with a rousing challenge to architects, highly worthy of repetition here. He said:

"As we pause momentarily to change horses we had best consider whether we have the fortitude to follow the course which lies open before us. There is a promise of unprecedented activity in building for years following victory. Whether it is healthy and constructive beyond anything history has known will depend in the deepest sense on us. We shall have the temptation of doing just enough to keep our offices filled with work. We shall have the temptation of getting by on what we remember of our school training instead of putting in the truly hard hours of learning how best to use the miracles which technology is offering us. We shall have the temptation of forgetting whether the desires of our clients make economic, social, and aesthetic sense, or merely offer the opportunity of handsome fees. We shall have the very great temptation of devoting ourselves wholly to making money, after years of starvation fare, instead of giving time and thought and effort to making the profession a more effective instrument of public welfare.

"We must dare to face these temptations and to win out. If we truly believe that architecture is the mother of the arts and that our training gives us the right to lead in the planning and organization of our physical environment we can do no less. We shall have opportunities that no architect has had before to mould our coming civilization. Let us seize them firmly—and the imperative responsibilities which they impose. For if we lose them now chance will never return them a second time to our grasp."

Upon assuming his new duties as president of the Chapter, Arthur Holden advocated a better understanding of fellow men on the part of architects. To point this up, he drew an apt comparison between the respective roles of literature and architecture as interpreters of society:

"Bernard DeVoto has written a penetrating book called the 'Literary Fallacy.' He attacks the thesis that the cul-

(Continued on page 108)

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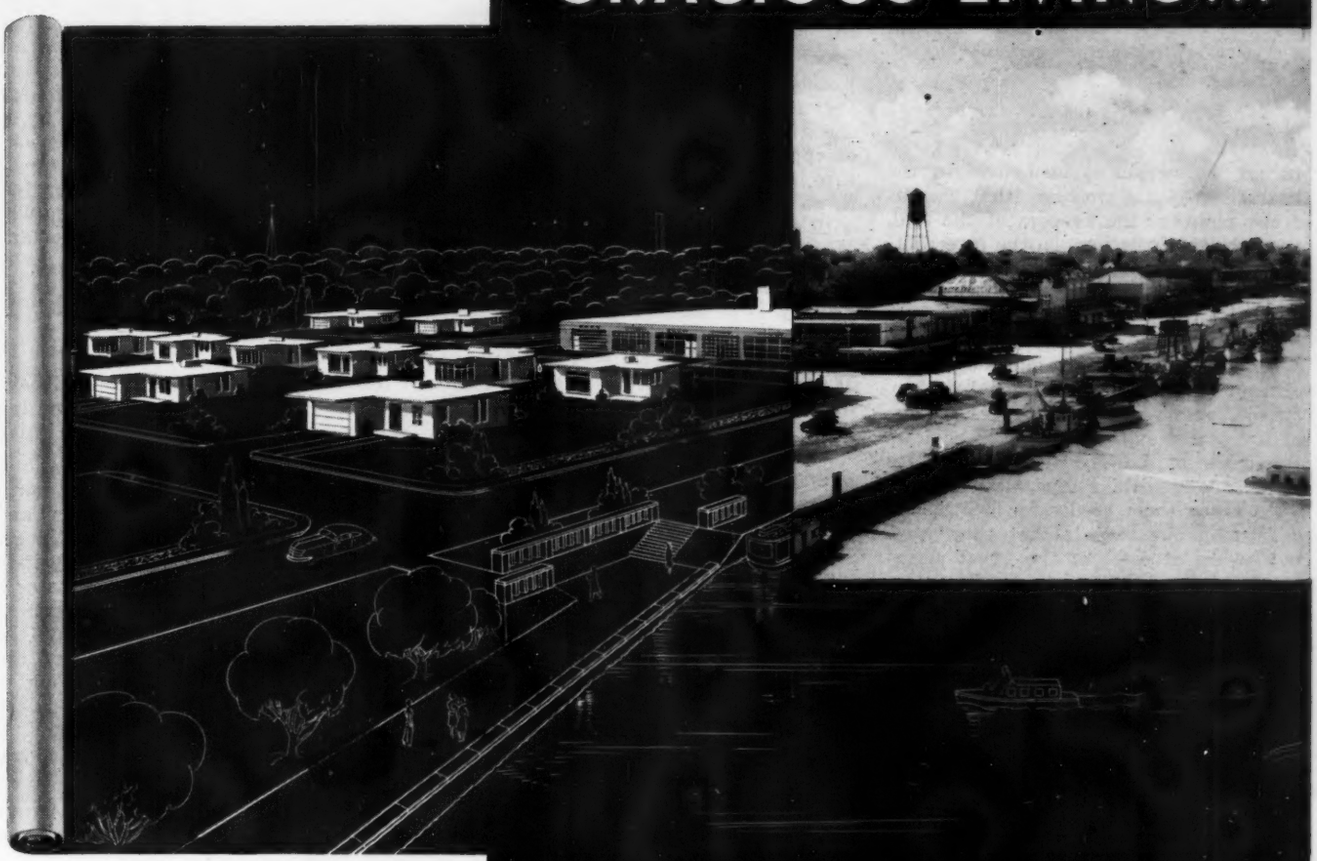

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UNIT OF NATIONAL STEEL CORPORATION

Views

(Continued from page 106)

ture of a period is enshrined in the literature of a period and that the literary men are the keepers of the seal, the priests of the temple, the interpreters of the civilization of their period. Have we architects had a similar vision of ourselves? Mr. DeVoto holds up Mr. Van Wyck Brooks as the expounder of this thesis, and he examines the criticism of some of the authors whom Mr. Brooks puts forward as representative of the period of the 1920's. He reviews the work of Lewis, Hemingway, Dos Passos, MacLeish, Fitzgerald. Mr. DeVoto gives them credit for being able craftsmen but reveals that they were not aware of some of the great movements of the time and so hardly interpreters of its culture. He shows them to be ignorant of fundamentals and concerned with trivialities. He reveals them as more interested in mirroring their own souls and their nostalgia than in delving into and understanding the culture of the 1920's.

"In particular, Mr. DeVoto points out that these authors, while seeming to lament a growing materialism, show no appreciation of the phenomenal progress made in medical research during the 1920's. These literary men were unaware of the great work of the geological survey and reclamation service which laid down the policy for the expansion of the arid lands of the west; they were silent as to the meaning of the great shifts in population and the disappearance of the frontier. Literature, he points out, may shut itself up in an ivory tower and get out of tune with the life and culture of a period.

"We in architecture must not be guilty of the same fault. The 'Architectural Fallacy' is as damaging and as narrowing as the 'literary fallacy.' Cast your eyes upon the facades of Park Avenue or of a typical main street. It is clear that the designers are trained craftsmen. We suspect that they may have walked through Spain, bicycled in France, and motored through Italy. The architect craftsman knows how to put a building together just as the literary craftsman knows how to put a book together. I include in this the so-called modernists who evidently have studied the architectural magazines. But this type of accomplishment does not reveal coherence. We must increase our contacts with the community if we expect to realize our ambition to help to mould and interpret the community. We have got to dig in deeper, to get at the roots. We must form new contacts. The day has gone by when the professions can be regarded as mysteries and can be practiced in watertight compartments.

"The times cry out for an understanding of life and of the forces which are moulding life. Let us make our first passion the passion to understand. We may thus learn how and where to apply our technical skills. If we understand our fellow men, we will learn how to serve them. If we can make them feel that we understand, it will be *they* who will call upon *us* and who will demand of us that we do our best."

On with the Old

Dear Editor:

I like your new Don Graf Data Sheets. In fact, I was on the verge of writing you and cancelling my subscription when the new series started.

If you scratch your head a bit you will probably recall Aristotle's "Ethics" and his advocacy of moderation in all things. Many of us wish you would apply it to PENCIL POINTS, which comes to us as a stranger with a familiar name. Granted that "modern" architecture (by the way, read Spengler's "Decline of the West" to get some interesting thoughts on the word "modern") has its place in the profession, so just as certainly has traditional architecture. You are giving us a lop-sided publication.

BRUCE W. ANGUS
Tenafly, N. J.

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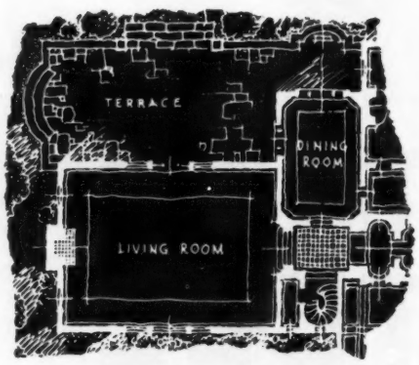

☆ AFTER THE WAR ☆

This war is keeping us all mighty busy these days — preventing us from going about our regular jobs.

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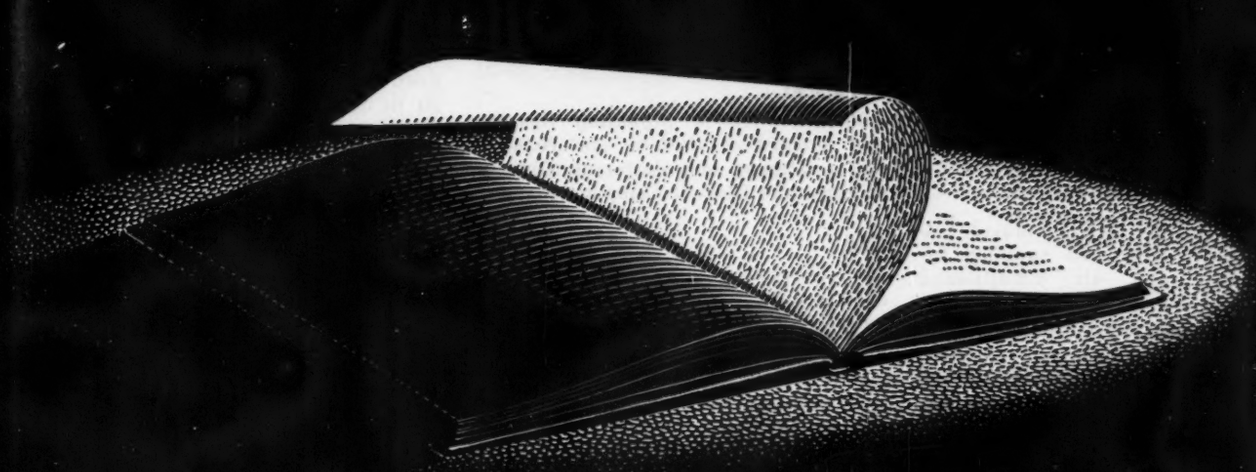
Building "Turns Over a New Leaf"



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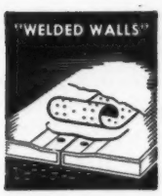

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Manufacturers' Literature

Air Conditioning

1-05. Folder on industrial equipment, 8 pages, Carrier Corporation.

1-06. A new loose-leaf, tabulated catalog of accessories and supplies for refrigeration and air conditioning plants is issued by York Corporation. It is designed to give "finger-tip" information on accessories and supplies, ice cans and air fittings, valves and fittings, oil, cold storage doors, renewal parts, tables, sizes, weights, performance data, net prices, photographs, mechanical drawings, etc.

Caulking

3-08. *Weatherproof Caulking* (A.I.A. File No. 7d), Minwax Company, Inc.

Cement

3-09. Lone Star Cement Corporation issues an illustrated 12-page booklet on *Heavy-Duty Floors with "Incor" 24-Hour Cement*, describing base preparation, mix, placing, finishing, and curing of cement for industrial floors.

Concrete

Three illustrated booklets from the Lone Star Cement Corporation present various information and illustrations on the uses of concrete:

3-10. *Cutting Concrete Costs* (data on costs, tables on forms, typical jobs, job planning, etc.)

3-11. *Cold-Weather Concreting* (tables on mix proportions, cost comparisons, graphs on approximate effect of temperatures on compressive strength of concrete, data on winter methods, etc.).

3-12. Watertight Concrete (selecting the mix, mixing and placing, curing).

3-13. *Why People Like Concrete Homes*, a 32-page booklet issued by Portland Cement Association, presents the reasons people like concrete homes by means of photos, plans, details, and brief text on actual houses from "everywhere."

Doors

4-02. *Kinnear Rolling Door Catalog* (A.I.A. File No. 16-D-13, Bulletin No. 39), 40 pages, Kinnear Manufacturing Company.

4-04. *Modernfold Doors for Homes*, New Castle Products.

Drawing Instruments

4-03. Literature from Charles Bruning Company, Inc.

Electrical Equipment

5-06. *More Capacity*, a 16-page pamphlet from Square D Company, describes a method claimed to convert obsolete and inadequate electric light and power panelboards to full efficiency without disturbing the existing box or conduit. "Before" and "after" illustrations with brief case histories are given.

Fire Alarms

6-06. *Fire Alarm Signaling Systems and Apparatus, Bulletin No. 1044*, 40 pages, Stanley and Patterson Division of Schwarze Electric Company.

Glass

7-04. *Thermopane*, a 16-page booklet issued by Libbey-Owens-Ford Glass Company, describes and illustrates the windowpane with built-in insulation. Made of two or more panes of glass separated by an insulating layer of dehydrated air, sealed at the edges at the factory with a patented metal-to-glass bond (to prevent dirt and moisture from entering the air space) stated to withstand tests of over 1000 lbs. per square inch, it is installed as regular window glass, and is claimed to keep homes warmer in winter, cooler in summer, reduce heating costs, and deaden outside noise. Data on double and triple sizes, thicknesses, and weights are given.

7-05. Light diffusion through "Magnalite" glass is described in an illustrated folder, *Magnalite Diffusing Glass* (A.I.A. File 26 A 526), from Mississippi Glass Company. "Magnalite" is a clear, water-white, sheet glass with both surfaces smooth and crossed by scientifically designed cylindrical lenses at right angles to each other on either surface. One set of lenses spreads light evenly at right angles to their axes; the other spreads light in the opposite direction to cover an area the shape of the glass opening. The total diffusion angles average 32 degrees.

7-03. *Daylight in Schoolrooms*, 11 pages, and *Glass Block in Hospitals*, 7 pages, Owens-Illinois Glass Company.

Heating

Steel boilers and air conditioners are described and illustrated in four booklets from Fitzgibbons Boiler Company, Inc.:

8-09. *Fitzgibbons 400 Series Hand Fired Steel Boiler* (A.I.A. File No. 30-C-1) (for small homes).

8-10. *Fitzgibbons 400 Series* (for small homes).

8-11. *Fitzgibbons Steel Heating Boilers "D" Type* (A.I.A. File No. 30-C-1) (for all heating systems).

8-12. *Fitzgibbons Directaire Direct-Fired Air Conditioners for Residential Heating* (A.I.A. File No. 30-C-1).

8-13. *Fitzgibbons Steel Boilers and Air Conditioners (1944 edition).*

8-06. *Catalog TW-95c* (A.I.A. File No. 29-D-2), 4 pages, Kewanee Boiler Corporation.

8-07. *Central Heating*, Ric-wil Company.

8-08. *Rocop Convectors, Catalog No. 140*, 12 pages, Rome-Turney Radiator Company.

8-14. *H. B. Smith Boilers for Factory Installations* is a collection of data compiled by the H. B. Smith Company, Inc., on using cast-iron sectional boilers in factory installations; includes illustrated reprints and a 12-page booklet on types of industrial boilers.

8-15. *Sturtevant Heavy Duty Heaters* (Catalog No. 462), a 36-page illustrated and diagrammed booklet from B. F. Sturtevant Company, deals with heavy-duty heaters designed particularly for industrial heating, ventilating, air conditioning, vapor absorption, and drying applications. They are adapted for use with the higher range of steam pressures encountered in industrial applications where, in spite of the use of deaireating heaters, the corrosive and deteriorating actions of oxygen and CO_2 are often encountered. Cross section and construction details, tables on temperature rise constants, dimensions, face areas, pressures, data tables on final temperature and rate of condensate, temperature charts, piping and installation notes, piping diagrams, weights, applications, specifications, etc., are given in considerable detail.

8-05. *Catalog No. 44* (heating, cooling, and air conditioning), 16 pages, Viking Manufacturing Corporation.

Insulation

9-01. *What Formica Is*, a 32-page illustrated booklet, 6x3¼", is published by the Formica Insulation Company. Among its many uses are listed decorative surface laminations, furniture, wainscoting, etc., together with information on its manufacture, grades, and types.

Lighting

12-06. *Looking Ahead at Lighting*, folder, General Electric Company Lamp Department.

12-02. *Architexts*, article, The Holophane Company, Inc.

12-07. *Supplement No. 1 to GEA-3203 E* (on fluorescent fixtures), General Electric Company.

Maintenance

13-01. *Modern Maintenance Methods*, 10 pages, A. C. Horn Company.

13-03. *From Foundation to Flagpole* contains 8 illustrated pages on structures where L. Sonneborn Sons, Inc., products for new construction or maintenance are used—said to be applicable from modern industrial plants to homes and apartments.

Paint

16-07. Folder on flat wall finish, A. C. Horn Company.

Pattern and Model Making

16-10. *How to Make Patterns and Mod-*

els with Gypsum Cement, 48 pages, United States Gypsum Company.

Pigments

16-11. Explanation of the principles of luminescence and discussion of their practical applications in the form of activated fluorescent and phosphorescent pigments are published in a 26-page booklet, *The ABC of Luminescence*, from the New Jersey Zinc Company. It contains definitions of luminescent terms, information on luminescent paints, papers, printing inks, plastics, textiles, a section on activating light sources, tables on comparative brilliance and visibility.

Piping

16-08. *Ric-wil Insulated Pipe Units*, folder, Ric-wil Company.

Plastics

16-05. *The Story of Vinylite Plastics*, folder, Plastics Division of Carbide and Carbon Chemicals Corporation.

Plumbing Fixtures

16-03. *Douglas Folders*, 8 pages, The John Douglas Company.

Plywood

16-06. *Victory Book*, Aetna Plywood and Veneer Company.

16-09. *Beautiful Wood for Beautiful Homes*, 14 pages, Mengel Company and United States Plywood Corporation.

School Equipment

19-05. *Book of Postwar Planning for Schools*, 48 pages, The Horn Manufacturing Company.

Steel

19-11. A 24-page booklet entitled *Armco Hangar Buildings* from the American Rolling Mill Company, gives details on its new portable steel hangar building which is claimed to be capable of carrying a higher load per pound of steel than any other current designs. There are two sizes, one with an inside width at the base of 152 feet and a height of 36 feet, 7 inches; one with a 192-foot width and a 48-foot height; the length may be any multiple of 17½ feet.
Arches are of pressed metal units bolted together into identical and interchangeable segments; circular arch rings weigh a maximum of 3 and 7 tons, are hinged to corrugated base plate (it is claimed an arch ring can be raised within 15 minutes by two 40-ft. poles, two sheaves, a winch truck). Standard "Steelox" panels span from arch to arch, serving as purlins and roofing, and are bolted to top chord of the arches.

19-06. *Industrial Steel Buildings* (A.I.A. File No. 14i), 18 pages, American Rolling Mill Company.

19-10. *M-P Movable Steel Partitions and Metlwal Paneling* (A.I.A. File No. 14M and No. 19F), 24 pages, Martin-Parry Corporation.

19-07. *How Zinc Saves Steel from Rusting*, 26 pages (6" x 9"), The New Jersey Zinc Company.

19-08. *Manual of Recommended Practice for Saxe Welded Erection System*, 42 pages, J. H. Williams & Company.

Swimming Pools

19-09. Pamphlet from Inertol Company, Inc.

Water Coolers

23-02. *Folder 185*, Ebco Manufacturing Company.

Waterproofing

23-09. *Raincoats for Building Exteriors*, booklet, A. C. Horn Company.

Water Softener

23-10. The "Permutit Spiractor," a cold lime-soda water softener, operates by catalytic precipitation. The softening process is said to take less than 5 minutes. Equipment is particularly recommended for municipal use, for cooling water treatment, and locomotive boilers. Details and diagrams are given in *Permutit Spiractor Bulletin 2384*, from the Permutit Company.

Welding

23-03. *Gas and Electric Welding Supplies and Accessories*, 20 pages, Air Reduction Sales Company.

Windows

23-05. *Bayley Windows, Doors, Operators* (A.I.A. File No. 16-e), 31 pages, William Bayley Company.

23-06. *Book of School Windows* (A.I.A. File No. 16el), 20 pages, Mesker Brothers.

23-07. *Book of Hospital Windows* (A.I.A. File No. 16el), 15 pages, Mesker Brothers.

23-08. *Book of Windows for Homes*, 28 pages, Mesker Brothers.

Wood Preservatives

Abesto Manufacturing Company issues 3 folders, 6" x 3¼", on wood preservers and chemical termite control, with 4 loose-leaf specification sheets on various types of roofing.

23-11. *Abesto Wood Preservers.*

23-12. *Abesto Cold Application Material for Damp Proofing, Built-Up Roofs, Roof Covering.*

23-13. *Abesto with Viscoroid Base.*

23-14. *Specification "A"—New Abesto Built-Up Roof; Specification "B"—Abesto Damp Proofing.*

23-15. *Specification "C"—Abesto Cold Cap Sheeting on Old Roofs; Specification "D"—Abesto Used for Re-Coat Work.*

23-16. *Specification "E"—Blind Nailing Using Abesto Products; Specification "F"—Flashing with Abesto Quick-Setting Plastic.*

23-17. *Specification "G"—Built-up Roof Over Old Smooth Surfaced Roof With Abesto; Specification "H"—Abesto Built-Up Construction on Concrete Deck.*

X-Ray Industrial Unit

24-01. Folder from North American Philips Company.

LITERATURE AND SAMPLES WANTED

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GENERAL PANEL CORPORATION, 103 Park Avenue, New York 17, N. Y. (Data, samples, catalogues for A.I.A. file, and any items of interest in the prefabrication of buildings and panels.)

C. N. FRANKLIN, Architect, 1739 Ninth Ave., Sacramento 14, Calif. (Data, samples, and catalogs for complete A.I.A. file.)

ELLEN G. SCHOENDORFF, Dipl. Ing. Architect, 261 Grove End Gardens, London, N.W. 8, England. (Data, samples, and catalogs for complete A.I.A. file.)

SCHOOL OF THE ART INSTITUTE OF CHICAGO, Industrial Design Department, Michigan Avenue and Adams Street, Chicago 3, Ill. (Data, samples, and catalogs for A.I.A. file.)

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